DOCUMENT RESUME

ED 481 447 HE 036 233

TITLE	Dealing with Foreign Students and Scholars in an Age of Terrorism: Visa Backlogs and Tracking Systems. Hearing before the Committee on Science. House of Representatives, One Hundred Eighth Congress, First Session (March 26, 2003).
INSTITUTION	Congress of the U.S., Washington, DC. House Committee on Science.
REPORT NO	House-Hrg-108-9
PUB DATE	2003-00-00
NOTE	95p.
AVAILABLE FROM	Superintendent of Documents, U.S. Government Printing Office, Mail Stop: SSOP, Washington, DC 20402-0001. Tel: 866-512-1500 (Toll Free); Fax: 202-512-2250. For full text: http://www.house.gov/ science.
PUB TYPE	Legal/Legislative/Regulatory Materials (090)
EDRS PRICE	EDRS Price MF01/PC04 Plus Postage.
DESCRIPTORS	College Students; Engineering; Federal Regulation; *Foreign Students; *Higher Education; Mathematics; *National Security; Sciences
IDENTIFIERS	*Student Tracking Systems; *Visas

ABSTRACT

The House Science Committee held a hearing on the enhanced security measures foreign students and scholars in science, mathematics, and engineering face when they apply for a visa and subsequently enroll in an academic or exchange program in the United States. This hearing was the second in a series on the need for balance between heightened security and scientific openness in the post-September 11 environment. It explored the development and implementation of enhanced visa adjudication and monitoring systems and their impact on individuals, universities, and research collaborations. Witnesses were: (1) Janice L. Jacobs, Deputy Assistant Secretary for Visa Services; (2) Shirley M. Tilghman, President, Princeton University; and (3) David Ward, President, American Council on Education. Appendixes contain answers to post-hearing questions and additional material for the record, including the written statements of the witnesses. (SLD)

HE 8262

DEALING WITH FOREIGN STUDENTS AND SCHOLARS IN AN AGE OF TERRORISM: VISA BACKLOGS AND TRACKING SYSTEMS

ED 481 447

HEARING

BEFORE THE

COMMITTEE ON SCIENCE
HOUSE OF REPRESENTATIVES

ONE HUNDRED EIGHTH CONGRESS

FIRST SESSION

MARCH 26, 2003

Serial No. 108–9

Printed for the use of the Committee on Science

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Available via the World Wide Web: http://www.house.gov/science

U.S. GOVERNMENT PRINTING OFFICE

85–890PS WASHINGTON : 2003

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2250 Mail: Stop SSOP, Washington, DC 20402–0001

HD8039.S33

BEST COPY AVAILABLE

COMMITTEE ON SCIENCE

HON. SHERWOOD L. BOEHLERT, New York, *Chairman*

LAMAR S. SMITH, Texas
CURT WELDON, Pennsylvania
DANA ROHRABACHER, California
JOE BARTON, Texas
KEN CALVERT, California
NICK SMITH, Michigan
ROSCOE G. BARTLETT, Maryland
VERNON J. EHLERS, Michigan
GIL GUTKNECHT, Minnesota
GEORGE R. NETHERCUTT, JR., Washington
FRANK D. LUCAS, Oklahoma
JUDY BIGGERT, Illinois
WAYNE T. GILCHREST, Maryland
W. TODD AKIN, Missouri
TIMOTHY V. JOHNSON, Illinois
MELISSA A. HART, Pennsylvania
JOHN SULLIVAN, Oklahoma
J. RANDY FORBES, Virginia
PHIL GINGREY, Georgia
ROB BISHOP, Utah
MICHAEL C. BURGESS, Texas
JO BONNER, Alabama
TOM FEENEY, Florida
VACANCY

RALPH M. HALL, Texas
BART GORDON, Tennessee
JERRY F. COSTELLO, Illinois
EDDIE BERNICE JOHNSON, Texas
LYNN C. WOOLSEY, California
NICK LAMPSON, Texas
JOHN B. LARSON, Connecticut
MARK UDALL, Colorado
DAVID WU, Oregon
MICHAEL M. HONDA, California
CHRIS BELL, Texas
BRAD MILLER, North Carolina
LINCOLN DAVIS, Tennessee
SHEILA JACKSON LEE, Texas
ZOE LOFGREN, California
BRAD SHERMAN, California
BRIAN BAIRD, Washington
DENNIS MOORE, Kansas
ANTHONY D. WEINER, New York
JIM MATHESON, Utah
DENNIS A. CARDOZA, California
VACANCY

BEST COPY AVAILABLE

CONTENTS

March 26, 2003

	Page
Witness List	2
Hearing Charter	3

Opening Statements

Statement by Representative Sherwood L. Boehlert, Chairman, Committee on Science, U.S. House of Representatives	9
Written Statement	10
Statement by Representative Ralph M. Hall, Minority Ranking Member, Committee on Science, U.S. House of Representatives	11
Written Statement	12
Prepared Statement by Representative Nick Smith, Chairman, Subcommittee on Research, Committee on Science, U.S. House of Representatives	13
Prepared Statement by Representative Eddie Bernice Johnson, Member, Committee on Science, U.S. House of Representatives	14
Prepared Statement by Representative Zoe Lofgren, Member, Committee on Science, U.S. House of Representatives	15

Witnesses:

Ms. Janice L. Jacobs, Deputy Assistant Secretary, Visa Services	
Oral Statement	16
Written Statement	19
Biography	21
Dr. David Ward, President, American Council on Education	
Oral Statement	22
Written Statement	25
Biography	30
Financial Disclosure	32
Dr. Shirley M. Tilghman, President, Princeton University	
Oral Statement	34
Written Statement	36
Biography	41
Financial Disclosure	42
Discussion	43

Appendix 1: Answers to Post-Hearing Questions

Ms. Janice L. Jacobs, Deputy Assistant Secretary, Visa Services	72
Dr. David Ward, President, American Council on Education	77
Dr. Shirley M. Tilghman, President, Princeton University	79

Appendix 2: Additional Material for the Record

Articles submitted by Ms. Lofgren	
"Security concerns may be shackling science," by Glennda Chui, *San Jose Mercury News*, March 3, 2003	84
"Visa restrictions hamper research," *San Jose Mercury News*, March 10, 2003	88

Page

In America's Interest: Welcoming International Students, Report of the Strategic Task Force on International Student Access, submitted by Marlene M. Johnson, Executive Director and CEO, NAFSA: Association of International Educators 89
Biography 91
Financial Disclosure 92

DEALING WITH FOREIGN STUDENTS AND SCHOLARS IN AN AGE OF TERRORISM: VISA BACKLOGS AND TRACKING SYSTEMS

WEDNESDAY, MARCH 26, 2003

HOUSE OF REPRESENTATIVES,
COMMITTEE ON SCIENCE,
Washington, DC.

The Committee met, pursuant to other business, at 10:19 a.m., in Room 2318 of the Rayburn House Office Building, Hon. Sherwood L. Boehlert (Chairman of the Committee) presiding.

COMMITTEE ON SCIENCE
U.S. HOUSE OF REPRESENTATIVES

Dealing with Foreign Students and Scholars in an Age of Terrorism: Visa Backlogs and Tracking Systems

Wednesday, March 26, 2003
10:00 AM
2318 Rayburn House Office Building (WEBCAST)

Witness List

Ms. Janice L. Jacobs
Deputy Assistant Secretary
Visa Services

Dr. David Ward
President
American Council on Education

Dr. Shirley M. Tilghman
President
Princeton University

Section 210 of the Congressional Accountability Act of 1995 applies the rights and protections covered under the Americans with Disabilities Act of 1990 to the United States Congress. Accordingly, the Committee on Science strives to accommodate/meet the needs of those requiring special assistance. If you need special accommodation, please contact the Committee on Science in advance of the scheduled event (3 days requested) at (202) 225-6371 or FAX (202) 225-0891.
Should you need Committee materials in alternative formats, please contact the Committee as noted above.

BEST COPY AVAILABLE

HEARING CHARTER

COMMITTEE ON SCIENCE
U.S. HOUSE OF REPRESENTATIVES

Dealing with Foreign Students and Scholars in an Age of Terrorism: Visa Backlogs and Tracking Systems

WEDNESDAY, MARCH 26, 2003
10:00 A.M.–12:00 P.M.
2318 RAYBURN HOUSE OFFICE BUILDING

1. Purpose

On Wednesday, March 26, 2003, the House Science Committee will hold a hearing on the enhanced security measures that foreign students and scholars in science, mathematics and engineering face when they apply for a visa and subsequently enroll in an academic or exchange program in the U.S. This hearing is the second in a series on the need for balance between heightened security and scientific openness in the post-September 11 environment, and it will explore the development and implementation of enhanced visa adjudication and monitoring systems and their impact on individuals, universities and research collaborations.

2. Witnesses

Ms. Janice L. Jacobs is the Deputy Assistant Secretary for Visa Services. Prior to this appointment, she served two years as Deputy Chief of Mission at the U.S. Embassy in Santo Domingo. Ms. Jacobs' 23-year foreign service career included a mix of Washington, D.C. and overseas assignments, including the Dominican Republic, Ecuador, Egypt, Ethiopia, France, Mexico, Nigeria, and Thailand. Ms. Jacobs received her BA in French and Education from Southern Illinois University and a Master's in National Security Strategy from the National War College.

Dr. Shirley M. Tilghman is President of Princeton University in Princeton, New Jersey. Before being named president, Dr. Tilghman served on the Princeton faculty for 15 years. A native of Canada, she received her Honors B.Sc. in chemistry from Queen's University in Kingston, Ontario and ultimately obtained her Ph.D. in biochemistry from Temple University in Philadelphia.

Dr. David Ward is the President of the American Council on Education, a membership organization of college presidents of 1,800 institutions and 76 other educational and exchange programs. Before taking on the presidency of ACE, Dr. Ward served as chancellor of the University of Wisconsin-Madison for eight years, where he received his doctorate in 1963. Dr. Ward came to the United States on a student visa in 1960 and, in 1976, he became a citizen of the United States.

3. Overarching Questions

The hearing will address the following overarching questions:

- Has the frequency of visa problems, including delays and denials, for foreign students and scholars changed from previous years? What progress has been made in streamlining the process and reducing the current backlog to facilitate legitimate travel for students and scholars?
- What steps have been taken to improve communication between the government agencies that secure the homeland and the institutions that rely on the contributions of foreign students and scholars to advance science and technology?
- When will SEVIS, the Student and Exchange Visitor Information System, be fully operational, linking government and school officials and enabling them to accurately track foreign students and scholars in real time? What challenges must be overcome before this can happen?

4. Brief Overview

- Foreign scientists and scholars are important to maintaining the vitality and quality of the U.S. research enterprise. In fact, almost 35 percent of advanced degrees are conferred upon foreign scholars resident in the U.S. for all areas of science and technology.
- That said, the events of September 11 were a stark reminder of the potential risks posed by foreign students. As a result, the Congress and the Administration took action to track foreign students and more carefully review the applications of those wishing to study sensitive areas of science and technology in the U.S.
- Colleges and universities have voiced concerns about the unintended consequences of enhanced security on our campuses. Many foreign students and scholars, and especially those from China, India and Russia, have experienced substantial delays in obtaining visas. Others have had their visas denied. This has resulted in missed program start dates, derailed scientific research and the loss of potential students and scholars to other destinations.
- Colleges and universities have also express concern about the implementation of SEVIS, the Student Exchange Visa Information System, which makes the names, residences and educational status of foreign students accessible to immigration officials. According to reports, there are delays in processing students, problems with system compatibility, and even additional delays in visa processing, as student information is not being saved in the database.
- One concern is that the restrictions make it undesirable to be a foreign student or scholar in the U.S., and there are anecdotal indications that universities in other countries, such as Germany and Australia, are stepping up recruitment of students and scholars that might otherwise attend American institutions. Failure to reconcile our equally important, equally legitimate needs for security and science could be a detriment to our education and research communities as well as scientific collaboration and exchange.

5. Background

Even before September 11, 2001, Congress had enacted laws to enhance the security of some activities relating to science, technology, and education. In response to events such as the 1993 World Trade Center bombing, concerns were raised about foreign students in the U.S. as well as the courses they studied and the research they conducted. Then, like now, many were concerned that our openness would provide terrorists easy access to our country. Others were concerned that we were training future terrorists in sensitive areas.

Processing and Approving Visa Applications

For many years, U.S. laws and practice have required certain visa applicants, such as those from certain countries or those wishing to study sensitive technologies, to go through additional security clearances. To assist consular officers in determining who should be subject to this enhanced review, the State Department maintains a Technology Alert List (TAL), which establishes a list of major fields of technology transfer concern, ranging from chemical and biotechnology engineering to lasers, as well as a list of designated state sponsors of terrorism.[1] In light of the terrorist attacks, the State Department increased the number of subjects included on the TAL significantly and added such sub-areas as community development, geography and urban planning. As a result, consular officers are requesting security clearances for more foreign scientists and students whose research or education falls into these sensitive technology categories. This review, known as Visas MANTIS, requires the application to be forwarded to Washington for review and a security advisory opinion to be provided before the consular officer can approve or deny the visa application.

The Administration is in the process of further strengthening the system used to review visa applications, especially as they relate to sensitive technology areas. One month after the terrorist attacks on New York and Washington, the President directed, through Homeland Security Presidential Directive 2 (HSPD–2), that the "[t]he Government shall implement measures to. . .prohibit certain international students from receiving education and training in sensitive areas." To fulfill the requirements of HSPD–2, the Office of Homeland Security and the White House Office of Science and Technology Policy established an interagency working group, and, on

[1] The seven countries that the U.S. has designated as state sponsors of terrorism are Cuba, Iran, Iraq, Libya, North Korea, Sudan, and Syria.

May 2002, the White House unveiled its proposal to create a panel that would screen foreign graduate students, post-doctoral fellows, and scientists who apply for visas to study "sensitive topics. . .uniquely available" on U.S. campuses. The screening would be conducted by an Interagency Panel on Advanced Science Security (IPASS), composed of representatives from the major U.S. science agencies as well as the State, Justice, and Commerce department. IPASS would be responsible for evaluating a number of variables on the visa application, including the applicant's background, education and training, country of origin, area of study, training or research, and nature of the work conducted at the college or university as well as the uniqueness of the knowledge, its availability, and the terrorist groups or organizations that wanted to gain access to it.

Although some originally suggested that IPASS could help reduce the backlog of visas, it now appears that the system will overlay and even incorporate some of the existing review systems—not replace them. Most colleges and universities are anxiously awaiting guidance on IPASS, and they are concerned that, if it is implemented incorrectly, the new system could further disrupt the basic workings of their research universities. Mostly, they are concerned that the criteria for the IPASS review could be expanded to include entire areas of study, rather than very specific research and development activities. They are also concerned that the system could apply new restrictions to students after they have begun to study at their institution, for which they were properly granted a visa. The final policy on IPASS, which will be implemented by the Department on Homeland Security, is pending further study.

Finally, the State Department announced in November 2001 that all men between the ages of 16 and 45 from certain Arab and Muslim countries would be subject to a waiting period on non-immigrant visa applications to conduct additional security screenings, particularly for those in high tech, engineering and science. In practice, this review, known by the name of CONDOR, has been applied to others, male and female, from almost any country.

Prior to 2001, consular officers had broad discretion to clear students and researchers—or to trigger a more thorough check through MANTIS. Even those who were studying sensitive areas of science and technology could be processed in as few as 10 business days—so long as the consular officer did not receive a negative response from Washington, D.C. In fact, consular officers were encouraged to facilitate travel and, at some posts, they even faced pressures to issue more visas.

Since the most recent terrorist attacks, however, strengthening the visa process as an anti-terrorism tool has taken on greater significance—especially since all 19 of the hijackers entered the U.S. on visas. The State Department has acknowledged the resulting delays and the backlog, and high-level Administration officials have described the current backlog situation as a "crisis." In late 2002, the State Department announced that they would return to a more normal visa processing time as a result of improved interagency and automated procedures. As part of that effort, they released 10,000 visas in the CONDOR backlog. The next month, 105 of those visas were recalled for security reasons. After further review, 70 of the recalled visas were cleared for release. Although the problems with the CONDOR review are being resolved, visa delays in MANTIS persist, despite efforts by the State Department to speed up visa processing.

Currently, there are a number of factors that contribute to the MANTIS backlog. Many are concerned that the TAL is too vague and that consular officers with little or no background in science are misapplying the broad categories. Others believe that the consular officers are using their discretion to err on the side of caution, broadly and subjectively interpreting State Department policies and guidance. Still others have attributed delays in processing visas—and their denial—to a provision in the 1994 Foreign Authorization Act, which established liability for consular officers who approve visas for applicants who then commit an act of terrorism. Anecdotally, the Committee has been informed that applicants can expect to wait three to nine months for their visa. There also have been reports of an increase in the number of students being denied visas entirely, often based on lack of evidence of a planned return to the home country. Finally, there have been reports that hundreds of foreign scientists, some eminent in their fields, have been blocked from entering the U.S., slowing research on diseases such as AIDS and West Nile virus and in areas such as space science and genetic mapping. More troubling, visa delays and denials have even plagued multi-million dollar research projects funded by the Federal Government and its agencies—the National Institutes of Health, the National Science Foundation and others. Many are concerned that this problem, which has produced an estimated backlog of 25,000 visa applications (most of which relate to science and engineering), persists and may be getting worse.

BEST COPY AVAILABLE

Monitoring Foreign Students

To improve the tracking of foreign students and scholars, Congress created the Student and Exchange Visitor Information System (SEVIS). This system was designed to link colleges and universities with foreign students and scholars with the State Department and the Immigration and Naturalization Service (INS) and allow them to share information, such as changes in the foreign student's address or educational status, in real time. Although SEVIS was created in 1996, the program was not fully implemented due to lack of funding and objections from the higher education community about the financial costs that colleges and universities would incur. The terrorist attacks in 2001 gave the program new urgency. Two laws, the USA Patriot Act and the Enhanced Border Security and Visa Entry Reform Act of 2002, fully funded the program and moved the compliance deadline from 2005 to 2003.

INS launched SEVIS as a voluntary program on July 1, 2002, with mandatory participation for all colleges and universities targeted for January 30, 2003. As the deadline approached, colleges, universities and associations expressed "enormous" compliance concerns. Among other things, they said that they had little information on how to implement the system—and little time to prepare. Even the Department of Justice Inspector General doubted that INS would be able to implement the system by the proposed deadline and cautioned Congress about the need for additional training for staff, school officials and INS inspectors and investigators.

On January 29, 2003, one day before the proposed deadline, INS granted a two-week grace period for mandatory compliance by schools, saying that the delay was to accommodate the schools that were experiencing technical problems. On February 15, SEVIS participation finally became mandatory.

Today, all schools and exchange programs are required to use the program as a condition of accepting foreign students and exchange visitors. INS-approved schools (those certified by the INS to accept foreign students and scholars) and exchange programs must use SEVIS to enter directory information on all foreign students (F–1) and visitors (M–1) at the time they accept the student/visitor's application to their program. When the student or exchange visitor arrives at a U.S. port-of-entry, the school or program is notified through SEVIS that the student/visitor is in the country and should be reporting for class. After the student enrolls, any changes in status (address, course of study, employment) is collected and maintained in SEVIS until the student either completes his or her current program or training and departs the U.S. or changes immigration status. Failure to enroll or falling out of status results notification to the appropriate federal agencies for investigation and enforcement.

Currently, schools are only required use SEVIS to record data on new students/visitors and changes in status for current students and visitors but, on August 1, 2003, information on all students and visitors will need to be maintained—and updated—in SEVIS.

As a result, colleges and universities are pushing hard for an operational system, but many have a number of specific complaints. Among other things, they continue to express concern about the technological flaws, which cause data to be lost or inaccurate and confidential SEVIS forms to be printed at colleges and universities in other states. They also are concerned about the lack of real time access to the data, saying students often have to wait weeks to apply for their visa because their name is not showing up in the database at the consular officer. Today, colleges and universities estimate that it can take as long as 1.5 hours to enter one student. Finally, they are concerned about the lack of training provided for campus officials and INS staff. This situation is likely to be compounded by the large numbers of foreign students and scholars who will apply to participate in summer exchange and education programs. Between now and August 1, an additional one million individuals will need to be registered in SEVIS, aggravating the technological and other problems that already exist.

Administration and the New Department of Homeland Security

Prior to the creation of the Department of Homeland Security, the State Department was responsible for issuing visas to foreign students who wanted to study in the United States. INS was responsible for determining which schools were entitled to accept foreign students, inspecting the documentation of persons arriving with student visas, keeping track of entries and exits of foreign students, monitoring the status of foreign students, facilitating the removal of foreign students when their status ends, and approving requests by aliens who were in the country through some other classification to acquire student status. Responsibility for each of these obligations was divided among several different offices, divisions and branches of the INS and among private contractors.

BEST COPY AVAILABLE

In the past, INS was criticized for not handling these responsibilities adequately and, on March 1, INS was dissolved and its duties were transferred to the new Department of Homeland Security (DHS). Under the new structure, SEVIS will be administered by the Bureau of Immigration and Customs Enforcement—the Department's law enforcement arm—instead of the Bureau of C tizenship and Immigration Services—the Department's service arm. Although the same people who were implementing SEVIS prior to the transfer are expected to be administering the program under the new structure, some colleges and universities have expressed concerns about having to deal with two separate bureaus for their foreign students and scholars.

6. Current Issues

Impact on Science Education and Research in the U.S.

In science and technology, foreign students make up about a third of all graduate students and contribute to the U.S. scientific effort in this capacity. In 1998, foreign students made up 30 percent of graduate students studying science and engineering in the U.S. and 33 percent of U.S. science and engineering doctoral recipients (52 percent in engineering (most foreign doctoral recipients settle in the U.S., although the percentage of those who return to their home country has been increasing), 49 percent in mathematics and computer sciences and 40 percent in physical sciences). Among college and university representatives, there is concern that if the foreign student population is reduced—or these students decide to return to their home country—personnel shortages could grow and U.S. capabilities could decline—especially since U.S. citizens are not currently attracted to these fields in sufficient numbers to replace these students.

According to the Institute of International Education, 582,996 international students attended colleges and universities in the United States in 2002. Yet, colleges and universities are concerned that new review requirements—and visa delays—could hamper their ability to compete for top students and scholars. Many report that registered students who have left the country have had difficulty returning—especially for students and scholars from China and India. According to these sources, if the length of their delay is significant it will have a negative impact on their ability to carry out their coursework, thesis research, qualifying exams and thesis defense. One concern is that the restrictions make it undesirable to be an international student in the U.S., and there are anecdotal indications that universities in other countries, such as Germany and Australia, are stepping up recruitment of students that might otherwise attend American institutions.

Finally, if visa delays become routine, foreign students and scholars in the U.S. may be unable to attend international conferences, interview for positions in their home countries and participate in international collaborations. There is anecdotal information about conferences relocating outside the United States to avoid immigration issues, making it harder for U.S. students and researchers to attend and reducing the flow of scientific information. In addition, many major user facilities are fundamentally international in nature, and limiting the ability of foreign researchers to use American facilities like Fermilab could have a negative impact on the ability of U.S. teams to participate in major international facilities overseas, such as the Large Hadron Collider and the International Thermonuclear Experimental Reactor.

7. Questions for Witnesses

Questions for Ms. Jacobs

- Has the frequency of visa problems, including delays and denials, for foreign students and scholars changed from previous years? What laws, policies or practices, if any, have contributed to this change?
- What type of data do you collect on the number and the resolution of visa applications? Can you disaggregate that data by region, visa category and clearance?
- What progress has been made in streamlining the process and reducing the current backlog to facilitate legitimate travel for students and scholars? What guidance is available to help consular officers balance our collective interest in facilitating legitimate travel and protecting our country against potential terrorists?
- What steps have been taken to improve communication between the government agencies that secure the homeland and the institutions that rely on the contributions of foreign students and scholars to advance science and technology?

Questions for Dr. Tilghman

- How have visa delays or denials affected the ability of your university to recruit and retain top students and scholars for education and research programs? How has that changed from prior years? What are the consequences—in both the short- and long-term—of visa delays and denials to your university (i.e., financial losses, empty classrooms, research delayed, or stalled, etc.)?
- Do you keep data on the number of foreign students and scholars enrolled in education or exchange programs at your university? Has the number of applications from foreign students changed from prior years? Are the numbers on the foreign students who have been accepted to your program but choose to go elsewhere beginning to change?
- What steps must be taken to fully implement the Student and Exchange Visitor Information System (SEVIS)? What problems has your university experienced with the system? Have the Immigration and Naturalization Service and the Department of Homeland Security been responsive to your concerns?
- What concerns, if any, do you have regarding the creation of a new panel to screen students and scholars who wish to study sensitive topics?

Questions for Dr. Ward

- How have visa delays or denials affected the ability of your member organizations to recruit top students and scholars for education and research programs in the U.S.? How has that changed from prior years? What are the consequences—in both the short- and long-term—of visa delays and denials to your member organizations (i.e., financial losses, empty classrooms, research delayed, or stalled, etc.)?
- What steps must be taken to fully implement the Student and Exchange Visitor Information System (SEVIS)? What problems have your members been experiencing? Have the Immigration and Naturalization Service and the Department of Homeland Security been responsive to your concerns?
- What concerns, if any, do you have regarding the creation of a new panel to screen students and scholars who wish to study sensitive topics?
- Have your member organizations noticed any trends regarding the participation of foreign students and scholars in U.S. programs?

Chairman BOEHLERT. It is a pleasure to welcome everyone here this morning to the second in what we expect will be a long series of hearings on how the War on Terrorism is affecting our nation's research enterprise.

Last October, we held a hearing on so-called sensitive but unclassified information, I still don't understand what that means, which looked at ways to balance the need for—of secrecy to protect our security with the need for openness to enable scientific inquiry. We continue to follow that issue very closely.

Today, we turn our attention to a more tangible set of issues: the backlog of visas for foreign students and scholars and the problems that plague the SEVIS tracking system. Problems with visas and SEVIS are at a critical point. One administration official has described the visa situation to be as a crisis. The origins of the crisis are easy to understand. The attacks of September 11 made clear the potential threat posed by the abuse of student visas and our shocking inability to counter that threat. As a Member, for several years, of the House Intelligence Committee, I take that threat very seriously.

The Administration and the Congress deserve credit for putting in place new and stricter protocols and for erring on the side of caution. With that said, the current situation is untenable. The visa problem is sometimes discussed as simply a problem for our universities that needs to be balanced against the need for security. But that is a distorted view. The reason for concern is that unnecessarily impeding the flow of students and scholars in and of itself can erode our national security.

Foreign students fill our graduate programs. Foreign scholars fill our faculty and laboratory positions. These people are a vital source of new ideas and perspectives, and the flow of students and scholars creates good will on which the U.S. depends and on—which would be difficult to generate as effectively any other way.

You know, talking about the threat to homeland security, some people say we need a Manhattan Project to come up with new tools in the War Against Terrorism. Let me point out that the Manhattan Project was not named for the birthplace of its leading participants. The U.S. has always been dependent on help from students and scholars who are not born and bred here. And that remains true today, even though our scientific enterprise is far more robust than it was in the 1940's.

So when we have a visa problem that impedes and even discourages the flow of foreign students, that is bad for our security. When we have a visa system that casts so wide a net that we can't focus on real threats, that is bad for our security. When we have a tracking system that creates undue burdens on the flow of students, that is a threat to our security. When we have a tracking system that can't be relied upon to provide accurate information systematically, that is a threat to our society.

Now I know that the Administration is working hard to solve these problems, especially through the still new Department of Homeland Security. Our effort today is to get a clear sense of the extent of the problems with visas and SEVIS and how we can all work together to solve those problems. I know other Congressional

Committees will be looking into these issues as well, as they should.

One problem we now—we have now is that there isn't even good data on the extent of the visa problem. Congressman Hall and I will be sending a letter to the General Accounting Office today, asking them to gather reliable data.

So as I said at the outset, this is just the first of many hearings on a very important subject. We all need to work together to assure that foreign students and scholars do not threaten our security, either by their presence or their absence.

[The prepared statement of Mr. Boehlert follows:]

PREPARED STATEMENT OF CHAIRMAN SHERWOOD BOEHLERT

It's a pleasure to welcome everyone here this morning to the second in what we expect will be a long series of hearings on how the war on terrorism is affecting our nation's research enterprise.

Last October, we held a hearing on so-called sensitive but unclassified information, which looked at ways to balance the need for secrecy to protect our security with the need for openness too enable scientific inquiry. We continue to follow that issue closely.

Today we turn our attention to a more tangible set of issues—the backlog of visas for foreign students and scholars, and the problems that plague the SEVIS tracking system. The problems with visas and SEVIS are at a critical point; one Administration official has described the visa situation to me as a "crisis."

The origins of the crisis are easy to understand. The attacks of September 11th made clear the potential threat posed by the abuse of student visas and our shocking inability to counter that threat. As a member of the Intelligence Committee, I take that threat seriously. The Administration and the Congress deserve credit for putting in place new and stricter protocols and for erring on the side of caution.

But that said, the current situation is untenable.

The visa problem is sometimes discussed as simply a problem for our universities that needs to be balanced against the need for security. But that's a distorted view. The reason for concern is that unnecessarily impeding the flow of students and scholars in and of itself can erode our national security.

Foreign students fill our graduate programs; foreign scholars fill our faculty and laboratory positions. These people are a vital source of new ideas and perspectives, and the flow of students and scholars creates goodwill on which the U.S. depends and which would be difficult to generate as effectively in any other way.

You know, talking about the threat to homeland security, some people say we need a Manhattan Project to come up with new tools in the war against terrorism. Let me point out that the Manhattan Project was not named for the birthplace of its leading participants. The U.S. has always been dependent on help from students and scholars who were not born and bred here. And that remains true today even though our scientific enterprise is far more robust than it was in the 1940s.

So when we have a visa system that impedes and even discourages the flow of foreign students that's bad for our security. When we have a visa system that casts so wide a net that we can't focus on real threats, that's bad for our security. When we have a tracking system that creates undue burdens on the flow of students, that's a threat to our security. When we have a tracking system that can't be relied upon to provide accurate information system, that's a threat to our security.

Now I know that the Administration is working hard to solve these problems especially through the still new Department of Homeland Security. Our effort today is to get a clearer sense of the extent of the problems with visas and SEVIS and how we can all work together to solve them. I know other Congressional committees will be looking into these issues as well.

One problem we have now is that there isn't even good data on the extent of the visa problem. Congressman Hall and I will be sending a letter to the General Accounting Office (GAO) today, asking them to gather reliable data.

So, as I said at the outset, this is just the first of many hearings on this important subject. We all need to work together to ensure that foreign students and scholars do not threaten our security—either by their presence or their absence. Thank you.

Chairman BOEHLERT. Thank you very much. Mr. Hall.

Mr. HALL. Mr. Chairman, you said it very well, and I may add to it a little bit, because I am concerned about the percentages. I am concerned from both directions. I am concerned about the American parent that provides tutelage and guidance and encouragement to a youngster to enter the field of science and the ability to get into the school, the ability to reach the graduate areas. I am concerned about those who have students who are near that capacity, but fall short and lose their seat in a college program to someone from another country.

I want to be blunt about this, and I want to be plain about it. I am pleased to join you in welcoming our witnesses here today. And I want to thank the Chairman for providing the opportunity for the Committee to explore an important issue that is at the intersection of strengthening homeland security and ensuring the well being of the Nation's science and technology enterprise.

Throughout much of our history, Mr. Chairman, a lot of Americans feel that the U.S. has benefited greatly from the infusion of scientific and engineering talent from abroad. While I don't doubt that, today U.S. universities still fill more—half or more of their graduate positions in many fields of science, mathematics, and engineering with foreign students. Many leaders in the academic world feel that without these students, research programs couldn't go forward. And we are told that about half of the graduates from these programs remain here, and without them, science and technology capabilities in the Nation would also suffer.

I would hope that we hear testimony today on how to lessen that percentage by attracting our own to these fields. I—while many feel that the Nation clearly benefits from this position, we know of the presence of international students. And no one would deny that it is imprudent for us not to be vigilant in guarding our borders against those who would do us harm. I don't categorize those that are in the schools here as among that, but it is a possibility of it.

There is evidence that some terrorists have exploited the student visa program, including at least one of the 9/11 terrorists. Therefore, effective screening of visa applications is reasonable and necessary. The issue we are confronting here today is not whether we need thorough and effective procedures for reviewing visa applications; rather it is to find an appropriate balance between two important National goals. We benefit from attracting talented international students to the universities, and we benefit by nurturing scientific collaborations and information's exchanged with foreign researchers. At the same time, we have to defend ourselves against terrorists and use the influx of foreign students only to compensate for a dearth of American students, who qualify scholastically to keep the country in a position of scientific leadership.

I realize that this is a large order, Mr. Chairman, and to produce this type of leadership by enticing 18 and 19-year-old American students, we have to prepare them better during the K through 12 years. This might lessen the 50 percent foreign participation we now experience in fields like engineering and others. This percentage of reliance on foreign students bothers me almost as much as this country with unbelievable energy potential production in offshore, shut-in areas, not just fossil fuels, but giant coal potential in the midsection of this country. There is no reason for us to rely

on OPEC members, one of whom has us engaged as we meet here today.

We need to find ways to ensure that broader security is applied effectively while ensuring the U.S. remains an inviting place for bright, foreign students to study and for scientific exchanges to occur with leading researchers from all parts of the world.

I hope our witnesses today will help us understand how the current visa application and approval system is functioning or malfunctioning. The questions are, where are the sticking points and how can it be made to work better? I invite your recommendations for specific government actions that could address problems that exist within the system. And I thank the Chairman for calling this hearing.

[The prepared statement of Mr. Hall follows:]

PREPARED STATEMENT OF REPRESENTATIVE RALPH M. HALL

I am pleased to join the Chairman in welcoming our witnesses to today's hearing. I want to thank the Chairman for providing this opportunity for the Committee to explore an important issue that is at the intersection of strengthening homeland security and ensuring the well being of the Nation's science and technology enterprise.

Many feel that the United States has benefited greatly from the infusion of scientific and engineering talent from abroad. Today, U.S. universities fill half or more of their graduate student positions in many fields of science, mathematics and engineering with foreign students. Many leaders in the academic world feel that without these students research programs could not go forward. We are told that about half of the graduates from these programs remain here, and without them, the science and technology capabilities of the Nation would also suffer. I would hope that we also hear testimony today on how to lessen that high percentage of foreign students by attracting more U.S. citizens to careers in science, mathematics and engineering fields.

While many feel that the Nation benefits from the presence of international students, no one would deny that it would be imprudent for us not to be vigilant in guarding our boarders against those who would do us harm. There is evidence that some terrorists have exploited the student visa program, including at least one of the 9/11 terrorists. Therefore, effective screening of visa applications is reasonable and necessary.

The issue we are confronting here today is not whether we need thorough and effective procedures for reviewing visa applications. Rather it is to find an appropriate balance between two important national goals. We benefit from attracting talented international students to our universities, and we benefit by nurturing scientific collaborations and information exchange with foreign researchers.

At the same time, we must defend ourselves against terrorists and use the influx of foreign students only to compensate for a dearth of American students who qualify scholastically to keep the country in a position of scientific leadership. I realize that this is a large order. To entice young Americans to pursue science and engineering careers, we must do a better job of preparing them in the K–12 years. In this way, we may be able to reduce the need to attract such a high percentage of foreign students in fields such as engineering.

We need to find ways to ensure that boarder security is applied effectively while ensuring the U.S. remains an inviting place for bright foreign students to study and for scientific exchanges to occur with leading researchers from all parts of the world. I hope our witnesses today will help us understand how the current visa application and approval system is functioning, or malfunctioning. The questions are: where are the sticking points, and how can it be made to work better? I invite your recommendations for specific government actions that could address problems that exist with the system.

I want to thank the Chairman for calling a hearing on this important matter. I appreciate the attendance of our witnesses today, and I look forward to our discussion.

Chairman BOEHLERT. Thank you very much. And our sole panel today consists of very—three very well qualified, distinguished witnesses to share their points of view with us: Ms. Janice Jacobs,

Deputy Assistant Secretary, Visa Services, Department of State; Dr. David Ward, President, American Council on Education; and Dr. Shirley Tilghman, President, Princeton University. Thank you all for serving as resources to the Committee. We are here to be educated. We are here to have a dialogue and see if we can't, working together, make some sense out of this rather confused situation. And we would like to deal with facts, too, and not emotional arguments.

I would ask that each of you appreciate that your statements will appear in the record at this juncture in their entirety. I would ask that you try to summarize, in five minutes or so, your main points, which will leave us ample opportunity for a good exchange of questions and answers. Ms. Jacobs, you are up first.

[The prepared statement of Mr. Smith follows:]

PREPARED STATEMENT OF REPRESENTATIVE NICK SMITH

I want to thank Chairman Boehlert for holding this hearing today to review the implementation of new security systems for processing and tracking foreign students, and the impact of these systems on our university system and research enterprise. This is our second hearing examining how to best achieve an appropriate balance between the need to secure the homeland and our desire for scientific openness and exchange.

As we all know, the world changed forever on September 11, 2001. With the stark realization that our homeland is not immune from horrific acts of terrorism, our priorities changed instantly. In the days and weeks that followed 9/11, we learned that the 19 terrorist hijackers received a total of 23 visas at five different posts, some of them student visas. Even more telling, six months after the terrorist attacks, approval notices for student visas were issued for two of the hijackers—Mohammed Atta and Marwan Al-Shehhi. It was strikingly clear that our system—with over 4,000 universities, colleges, and trade schools educating almost 600,000 foreign students—would need to undergo changes to ensure that all foreign students are better scrutinized, and that those who may wish to do us harm not be allowed to enter the country. It was also clear that there be better tracking of foreign students once they have entered the country.

To its credit, the Federal Government acted immediately to respond to this problem. The government has strengthened the system to review visa applications. Also, two new laws, the USA Patriot Act and the Enhanced Border Security and Visa Entry Reform Act of 2002, provided funding for the Student Exchange and Visitor Information System (SEVIS), and moved the compliance deadline for this system from 2005 to 2003. SEVIS requires colleges and universities to inventory and update detailed information such as names, residences, and educational status of all foreign students, and to make this information available to immigration officials. I believe these efforts, while imposing additional burdens on college and university administrations, are an appropriate and needed response to our security concerns related to higher education.

Unfortunately though, these systems are still very much in the development stage, and are not without their share of problems. For example, while SEVIS has now been in operation for eight months, it has been hampered by numerous technical problems—such as lost information and other data processing errors that have had a significant impact on students and university research endeavors alike. These problems have raised real concerns that foreign students, which comprise 35 percent of all U.S. science and engineering graduate students, are now increasingly considering receiving their educations in other nations such as Canada and Australia where security restrictions are far less. Further, our foreign competitors have recognized this opportunity and are increasing recruitment of students that may have otherwise attended U.S. institutions. It is clear that if this trend continues to grow, the quality of university research will suffer, at least over the short-term.

While we should be careful not to downplay these problems, I am confident that they will be resolved in a reasonable amount of time. This will require adequate support and guidance from Congress, the State Department, university organizations, and the Department of Homeland Security. In the meantime, I believe it should motivate us to place a much higher priority on increasing the number and quality of U.S. math and science students. Security should remain the top priority for the government, and we should continue to err on the side of caution in dealing

with foreign students that pose potential risks. It is indeed a difficult balancing act, but with patience and persistence, there is no reason why we cannot have a system that ensures security in its handling of foreign students without sacrificing scientific exchange.

I hope that today's discussion enlightens the Committee as to the extent and seriousness of the problems associated with the handling of foreign students, and I am looking forward to a productive discussion.

[The prepared statement of Ms. Johnson follows:]

PREPARED STATEMENT OF REPRESENTATIVE EDDIE BERNICE JOHNSON

Thank Mr. Chairman, and thank you for calling this hearing today. I would also like to thank our invited guest for appearing.

We have gathered here today to discuss the impact of security measures to control entry of foreign students and scholars into the United States. We all agree that foreign scientists and scholars are important to maintaining the vitality and quality of the U.S. research enterprise. In fact, almost 35 percent of advanced degrees are conferred upon foreign scholars resident in the U.S. for all areas of science and technology.

However, because of the events of September 11, Congress and the Administration took action to track foreign students and more carefully review the applications of those wishing to study sensitive areas of science and technology in the U.S.

But scientists and educators complain that consular officers are using vague, arbitrary standards to decide which visa applications to refer for security reviews, trapping legitimate foreign researchers in a frustrating backlog.

These delays bother educators and scientists, who say the free exchange of ideas is essential to scientific discovery. They point out that foreign-born scientists have been responsible for many major advances in medicine and technology, including the kidney dialysis machine, the Pap smear, plastic and the atomic bomb.

The National Academies (the National Academy of Science, the National Academy of Engineering and the Institute of Medicine) complained back in December that recent efforts by the government to constrain the flow of international visitors in the name of national security are having serious unintended consequences for American science, engineering and medicine.

It is a sad day when even the research to combat chemical biological terrorism has been stalled by the visa delays.

In fact, in my home state of Texas, the 44,192 foreign students at colleges and universities fuel Texas' economy with money is spent on tuition and living expenses in excess of $700 million dollar during the 2001–02 school year alone. Therefore, foreign students are an essential part of our economic structure.

Let me make this clear, educators and scientist support tighter screening of visitors after 9/11. However, something must be done to stream line the visa. Here a few suggestions to do just that:

Recommendations to Streamline Visa Processing

- Given the reality of limited resources, the U.S. government must closely focus its efforts and establish a viable means to identify the pool of visa applicants that requires special screening, so that it can process non-problem applications quickly and efficiently and dedicate scarce resources to addressing real security needs.
- A system for students and scholars already in the United States who are departing for short trips outside the country (conferences or vacations) should be established, similar to pre-screening mechanisms that already exist for other visa categories, that allows them to begin processing of their re-entry documents prior to leaving the United States.
- Realistic time estimates for visa screening should be clearly articulated, so that international educators can advise their students and scholars. The current incomprehensibility and seeming randomness of the visa screening process is harmful to U.S. diplomatic and foreign policy interests and must not become the norm.
- Congress has charged a number of federal agencies with the task of screening potential visitors to the United States. It must provide them with adequate resources to fulfill that mandate. Currently, limitations in system capabilities and personnel have resulted in indefinitely suspended decisions on large numbers of visa applications. This situation is inconsistent with U.S. foreign policy objectives and must be remedied.

Now I have a few questions for our guest.

[The prepared statement of Ms. Lofgren follows:]

PREPARED STATEMENT OF REPRESENTATIVE ZOE LOFGREN

Mr. Chairman, thank you for holding this very important hearing on the effects of enhanced security screening on foreign students and scholars. As a Member of Congress from Silicon Valley, I always worry when I hear that federal action threatens the academic and research community.

As you know, my district lies in the heart of Silicon Valley, a community on the cutting edge of technology and scientific discovery. We not only depend directly upon exemplary researchers from around the world, but we also indirectly depend upon universities to train top-notch students to become our future Einstein's. So when I hear troubling stories of foreign researchers and students experiencing unnecessary delays in obtaining visas or being denied visas for arbitrary reasons, I worry.

Just recently, I read two articles by the San Jose Mercury News, one entitled "Security Concerns May Be Shackling Science" and another "Visa Restrictions Hamper Research." In a time when Silicon Valley is suffering a very serious economic slowdown, a visa program that hampers research and technology in Silicon Valley is the last thing we need.

One article described the denial of a visa to a Chinese AIDS researcher attempting to return to his California biotech company after a trip overseas. Ironically, this came at a time when the President promised a $15 billion initiative to fight the global HIV/AIDS epidemic.

The article went further to describe a very troubling visa delay. Despite serious concerns over unsecured Russian nuclear weapons falling into the hands of terrorists, Russian physicists reportedly missed a training program in California that would have taught them how to safeguard dangerous nuclear weapons—all because their visas were not approved on time.

Even worse is the story of Iranian earthquake expert so worried about visa restrictions in the United States that he chose to go to Canada instead of UC–Berkeley. As you well know, UC–Berkeley is located in the San Francisco Bay Area where deadly earthquakes are always a threat.

The tragedy of September 11, 2001 makes us understandably wary of foreigners who attempt to enter this country to commit and promote terrorism. This is why it is extremely important that we all reiterate our strong support for enhanced and effective security screening for all visa applicants.

As a recent *San Jose Mercury News* editorial states, "the answer is not to eliminate security checks, but to do them efficiently." We must find a way to protect our security while also doing our best to minimize the negative effects on our universities, businesses, and research institutions attempting to attract a diverse group of top-notch researchers, students, and business associates from around the world.

The implications of an inefficient visa program that promises bureaucratic hurdles without added security also creates problems for us in the foreign policy arena. I recently learned that the State Department is engaged in a public relations campaign to win the hearts and minds of Middle Easterners. Apparently, the State Department is spending $1 million on a radio station and a scholarship fund to attract students from Arab nations and to combat American misperceptions in the Middle East.

But when students apply to attend an American university, they're finding it extremely difficult to navigate a complicated visa process that can often extend beyond three months. Some Middle Eastern students face even more difficult problems because they receive only single-entry visas and are required to go through a new visa process every time they leave the country. This means it is virtually impossible for them to return home for winter vacation and even long summer breaks because obtaining a visa can sometimes take more than three months. For graduate students, it could mean seven years away from family and friends. For young seventeen- and eighteen-year-olds leaving home for the first time, it could mean four years away from parents and familiar surroundings.

If we are truly engaged in a public relations battle to change the image of the United States in the Middle East, we have to follow up on our radio and scholarship program with a visa system that considers the needs of visitors without sacrificing our number one priority—security.

The time to act is now before we do permanent damage to our science, technology, academic, and business communities and before we permanently tarnish our image. We must create a visa system that incorporates enhanced security checks necessary

BEST COPY AVAILABLE

in a post-September 11th environment, but without the unnecessary bureaucracy that endangers our scientific leadership and image around the world.

STATEMENT OF JANICE L. JACOBS, DEPUTY ASSISTANT SECRETARY, VISA SERVICES

Ms. JACOBS. Thank you very much, Mr. Chairman and Members of the Committee. I welcome the opportunity to testify today regarding the visa process for students and scholars. Visa——

Chairman BOEHLERT. I can't hear what you are saying.

Ms. JACOBS. I am sorry. Can you hear me now?

Chairman BOEHLERT. Yeah, I think we are all right now. Thank you——

Ms. JACOBS. Okay.

Chairman BOEHLERT [continuing]. Very much.

Ms. JACOBS. All right. Visa work has always been about striking the proper balance between protecting U.S. borders and facilitating legitimate travel. Our operating environment changed forever on September 11, 2001, and there is no turning back the clock. Security is, and will continue to be, the top priority in the processing of visas for international visitors. The State Department is committed to strengthening the visa process as a tool for protecting U.S. national security interests. We have made a number of changes since 9/11 and will continue to do so in response to the security needs of our nation and recommendations by law enforcement and national security agencies, and of course, the Department of Homeland Security. At the same time, the State Department is keenly aware of the need to balance national security interests with other strategic interests, such as promoting scientific and academic exchange and the overall health of our economy.

Enhancing U.S. security means pushing borders out to our visa processing posts abroad. Here, I am happy to report that we have made enormous progress in identifying individuals who may present a threat to our nation through enhanced interagency data sharing. Since 9/11, we have added over 7.3 million new records, primarily FBI NCIC, which is criminal history data, to our Consular Lookout Automated Support System, or as we call it, CLASS. The TIPOFF database on suspected or actual terrorists has incorporated into CLASS over 73,000 entries, an increase from the 48,000 records that existed on 9/11/2001.

We try to work smart. We have been big users of automated tools. Thanks to the work of Congress, our Machine Readable Visa fees have allowed us to invest in new technology. We continue to refine this technology and to increase connectivity between the Department, overseas posts, and other agencies. But technology can't do it all. We are working with other interested agencies on a rational, more targeted clearance process that is both transparent and predictable.

We are in pretty good shape to find the "bad guys" who have already been identified by other agencies and who are included in our visa lookout system. Dealing with what we don't know is, of course, more of a problem. For that, we have the security advisory opinion process to permit other agencies to take a look at a case before we issue a visa.

Before I describe in detail the system whereby we handle the visa requests of students and scholars whose travel has national security or technology transfer implications, let me say a word about the delays and backlogs that have effected foreign visitors and U.S. institutions in the past year.

The procedures we now use to assure ourselves that students and scholars working in the technology area do not pose a threat to the U.S. are very similar to those used in the past. The U.S. vets these applications with law enforcement agencies, the intelligence community, and our own Nonproliferation Bureau before a visa may be issued.

Why did the process work more rapidly in the past? For two reasons, first the volume of visas that require security advisory opinion clearances has exploded since 9/11, overwhelming the technical and personnel infrastructure that the Federal agencies, including the State Department, had in place to handle this work. Secondly, we cease to use working on a clock whereby a clearance not answered within a certain period of time was, in effect, a clearance granted automatically to the affected post that allowed that post to issue the visa without further reference to Washington.

In the post-9/11 environment, we do not believe that the issues at stake allow us the luxury of erring on the side of expeditious processing. We now insist upon hearing from law enforcement before we issue these visas. Expanding the clearance universe as we did and dropping our clock would, in more tranquil times, have been a process put into place over months, if not years, while we built the infrastructure to accommodate the work entailed. We did not have the luxury of time after 9/11, so we moved as quickly as we were able to strengthen the visa process and thereby the security of our borders.

The result was improved security but at a cost of greatly increased processing times. We have, as I will explain, provided more resources to cope with this problem, and we are making substantial progress, but I do not foresee a return to the more rapid processing we enjoyed when we thought the threat to our country was less than it turned out to be.

Our first obligation in this review process is to ensure that no individual receives a visa who intends to do us harm or violate the laws of the United States. This includes individuals who may be coming to unlawfully obtain an export-sensitive technology or information, especially if it relates to the development or spread of weapons of mass destruction or their associated technologies. The major events now unfolding in Iraq, as our military forces and our coalition partners endeavor to rid that nation of weapons of mass destruction, dramatically underscore our nation's commitment in this regard.

At the same time, we fully recognize that the vast majority of visa applicants who seek to come to the U.S. for study, research, or temporary employment in scientific and technical fields are legitimate. We are keenly aware of our double-edged responsibilities in the area of national security and facilitation of legitimate scientific exchange. This is not an easy balance to strike, especially since the 9/11 terrorist attacks, but we are working every day,

along with other agencies involved in the visa review process, to find that proper balance.

Our caseload in this review process, which goes by the identifier of Visas Mantis, has grown substantially. Denials under the Mantis program increased from three findings of ineligibility under INA 212(a)(3) in 2001 to 30 such findings in 2002. At any given time, we have from 1,500 to 2,000 cases pending in the interagency process review.

The Bureau of Consular Affairs Visa Office performs essentially a coordinating role in this clearance process. Cases are submitted by our visa issuing posts abroad for review simultaneously to us, States Nonproliferation Bureau, and the intelligence and law enforcement community. Each reviewing entity advises us if it has concerns about a particular case. We review the evidence supporting those concerns in light of the relevant ineligibility provisions of the Immigration and Nationality Act and advise the post processing the case as to whether or not a legal basis exists for denying the visa. We ensure consensus before releasing a response to a consular officer. In other words, we never advise a consular officer to go ahead and issue a visa in a specific case, no matter the sense of urgency, while there is an objection from another agency that has not been resolved.

The increase in Visas Mantis referrals, as well as similar increases in other categories of security-related referrals, has seriously stressed the interagency clearance process. As a result, cases on the average are taking longer to complete than in the pre-9/11 environment. In our capacity as the coordinating agency, the Department has made significant progress in addressing these delays. We have negotiated agreements with other agencies, implemented a number of procedures to streamline the clearance process, and reprogrammed staff in order to decrease the turnaround time for Mantis clearances. We can now return clearances on cases raising no problems in 30 days or less.

The Department has engaged in significant outreach to other agencies to eliminate long delays and to assuage the fears of the scientific and academic communities. The Department has had regular and frequent contact with the Homeland Security Council since its inception in September of 2001. We participate regularly and frequently in interagency meetings convened by the White House Office of Science and Technology Policy. We also participate in activities with members of the scientific and academic communities to share information on our clearance requirements and to learn their needs.

I assure you, Mr. Chairman, that the Bureau of Consular Affairs will continue these and any other feasible efforts to enhance and expedite interagency review of these cases, consistent with our overriding obligations to protect our borders and prevent weapons of mass destruction and their associated technologies from falling into the wrong hands.

I am submitting, for the record, a written statement that discusses in greater detail our role in this visa review process. Again, thank you for affording me this opportunity to discuss the Bureau of Consular Affairs role in this vitally important process. And I will be happy to answer any questions that you have on this matter.

[The prepared statement of Ms. Jacobs follows:]

PREPARED STATEMENT OF JANICE L. JACOBS

Thank you very much Mr. Chairman and Members of the Committee. I welcome the opportunity to testify today regarding the visa process for students and scholars.

Visa work has always been about striking the proper balance between protecting U.S. borders and facilitating legitimate travel. Our operating environment changed forever on September 11, 2001, and there is no turning back the clock. Security is and will continue to be the top priority in the processing of visas for international visitors. The State Department is committed to strengthening the visa process as a tool for protecting U.S. national security interests. We've made a number of changes since 9/11 and will continue to do so in response to the security needs of our nation and recommendations by law enforcement and national security agencies, and of course the Department of Homeland Security. At the same time, the State Department is keenly aware of the need to balance national security interests with other strategic interests such as promoting scientific and academic exchange and the overall health of our economy.

Enhancing U.S. security means pushing borders out to our visa processing posts abroad. Here, I am happy to report that we've made enormous progress in identifying individuals who may present a threat to our nation through enhanced interagency data sharing. Since 9/11, we've added over 7.3 million new records, primarily FBI NCIC (criminal history) data, to our Consular Lookout Automated Support System (CLASS). The "TIPOFF" database on suspected or actual terrorists has incorporated into CLASS over 73,000 entries, an increase from 48,000 records on 9/11/2001.

We try to work "smart." We have been big users of automated tools. Thanks to the work of Congress our Machine Readable Visa fees have allowed us to invest in technology. We continue to refine this technology and to increase connectivity between the Department, overseas posts, and other agencies. But technology can't do it all. We're working with other interested agencies on a rational, more targeted clearance process that is both transparent and predictable.

We're in pretty good shape to find the "bad guys" who have already been identified by other agencies and are included in our visa lookout system. Dealing with what we don't know is of course more of a challenge. For that we have the security advisory opinion process to permit other agencies to take a look at a case before we issue.

The Department of State has long used specialized clearance procedures for the review of visa applications of individuals whose proposed activities in the U.S. may have security-related or other concerns. These programs carried out by the State Department at the request of and in coordination with other federal agencies. The Visas Mantis program is one such program related to technology transfer concerns. Federal agencies participating in the Visas Mantis program review select applications and provide the information needed by State to determine an applicant's visa eligibility under section 212(a)(3)(A)(i)(II) of the Immigration and Nationality Act. That section provides in relevant part that:

Any alien who a consular officer or the [Secretary of Homeland Security] knows, or has reasonable ground to believe, seeks to enter the United States to engage solely, principally, or incidentally in—

> (i) any activity. . .(II) to violate or evade any law prohibiting the export from the United States of goods, technology, or sensitive information.. . .is ineligible to receive a visa.

Prior to 1998, the Department reviewed cases for controlled technology, sensitive information concerns under several nationality-based programs, e.g., CHINEX for PRC nationals, SPLEX for nationals of the Soviet Union and Eastern Europe. In 1998, the Department consolidated these nationality-based, Cold War era screening procedures into the Visas Mantis program. The Visas Mantis program is an effective tool for U.S. intelligence and law enforcement agencies to support consular officers in screening individuals and entities that seek to gain controlled goods, technology and sensitive information in violation of U.S. export laws.

Most other special clearance procedures are triggered by clear and objective circumstances, such as applicant nationality or CLASS name check results. However, in cases of illegal technology transfer, falling within the purview of INA Section 212(a)(3)(A)(i)(II), the Department must rely to a great extent on the observations and judgment of consular officers in the field to identify applicants of any nationality who may be subject to this ineligibility. To assist officers in this difficult and vitally important task the Department, in conjunction with federal intelligence and

national security agencies, regularly updates a list of policy objectives and critical technologies, which trigger special clearance requests.

In deciding to submit an application for review for reasons related to possible illegal technology transfer, the consular officer must first determine whether the applicant's proposed activity in the United States would involve exposure to any of fifteen sensitive technologies included in the Technology Alert List (TAL). In deciding whether one of the listed TAL activities may be in violation of U.S. export control laws, the consular officer must review that activity in light of the following broad policy objectives related to technology transfer:

- Stem proliferation of weapons of mass destruction and missile delivery systems.
- Restrain the development of destabilizing conventional military capabilities in certain regions of the world.
- Prevent the transfer of arms and sensitive dual use items to terrorist states.
- Maintain U.S. advantages in certain militarily critical technologies.

Second, for applicants from any of the countries designated by the Department to be state sponsors of terrorism, (Cuba, Iran, Iraq, Libya, North Korea, Sudan and Syria) consular officers are instructed to assume that any visit providing exposure to any of the technologies on the Technology Alert List will conflict with the policy objectives, and therefore a Visas Mantis special clearance is mandatory under these circumstances.

Third, consular officers may send to Washington any case that appears to warrant further interagency review.

The Visas Mantis program, therefore, provides the Department and other interested agencies with an effective mechanism to screen out those individuals who seek to evade or violate our laws governing the export of goods, technology or sensitive information. This screening in turn addresses significant issues of national security and works to enhance our national security. The Visas Mantis program allows all participating agencies to provide information and raise any particular concerns they may have regarding the applicant and/or the proposed activities in the U.S.

The Department strives to balance this effort to protect our national security with our responsibility to facilitate legitimate travel and scientific exchange. We recognize that scientific exchange supporting a wide range of research and development in the United States is a vital component of our national security. We, therefore, have worked diligently and creatively to clear legitimate travelers subject to Mantis clearances as quickly as possible and, at the same time, to deter or prevent potentially inadmissible travelers from gaining entry to the United States.

The Visas Mantis case load grew significantly from calendar year 2001 through 2002. At any given moment, we have from 1,500 to 2,000 Mantis cases pending in this interagency review process. The increase is attributable to increasingly vigorous interagency review of Mantis cases, and has led to an increasing number of refusals under section 212(a)(3)(A)(i)(II) of the Immigration and Nationality Act.

The Mantis case load represents only about 10 percent of all visa cases submitted by posts abroad for review through the security advisory opinion (SAO) process. SAO submissions across the board have risen dramatically since the 9/11 terrorist attacks. These increases have stressed the review process and forced some procedural changes which increased the amount of time needed to complete SAO reviews.

In addition to a Visas Mantis check, some students and academics fall under the Visas Condor program that began in January 2002 in counter-terrorism purposes. In consultation with U.S. national security and law enforcement agencies, the Department implemented the Visas Condor program to ensure that nationals of certain countries of concern meeting certain criteria were subject to a security review.

Some of the delays that you have heard about are the result of the Visas Condor, not Visas Mantis program. When the Condor program was first instituted, it was put on a "clock," a procedure traditionally used in many of the clearances. If the Department had not received derogatory information from a cooperating agency or agencies within thirty (30) days of the date of the cable, then we could assume that other agencies had no objection to the issuance of a visa. The agencies assured us that they could and would notify us within that 30-day period. If post did not hear from the Department by the end of that time, it could process the case to conclusion.

The Visas Condor program resulted in a significant increase in the number of cables sent to federal agencies for review. All participating agencies found their resources strained as they took on substantially more work. In the summer of 2002, in consultation with other agencies, the "clock" system was ended because it was no longer reliable. Agencies were having trouble meeting the 30-day period. Instead, we now wait for an affirmative response from agencies before approving a visa.

These two enhancements to our security screenings—the Visas Condor program that added a significant population subject to security advisory opinions and the need for an affirmative response from the other participating agencies—resulted in significant delays in processing all security advisory opinion requests, including Visas Mantis clearances.

Since last summer, each agency has taken measures to improve or increase resources to address these delays. The Bureau of Consular Affairs also worked to better improve its performance as the clearinghouse for compiling other agency responses and provide a coordinated reply to the consular officer overseas. In concert with other agencies we implemented a number of procedures to improve our use of automation and add personnel. To date these measures include:

- The addition of two permanent visa specialists, two retired Foreign Service Officers, and six contract employees,
- the "detail" of two clerical employees,
- the cross-training of other clerical staff to provide overtime support,
- the improvement of case tracking methodology, and
- the improvement of automation related to data share between agencies.

In general, the Bureau of Consular Affairs has noted the measures taken by all participating agencies have improved response time so that clearances on most cases raising no problems are available to consular officers within thirty (30) days or less.

The Department has engaged in significant outreach to our federal partners to work through problems and to improve predictability for the scientific and academic communities about visa processing. This outreach includes regular and frequent contact with the Homeland Security Council since its inception in September 2001, and now with the Department of Homeland Security. Our goal is to rationalize the clearance process in light of today's national security threats and re-establish rational, transparent clearance procedures that focus on those applicants who present the highest risk. The Department also participates regularly and frequently in interagency meetings convened by the White House Office of Science and Technology Policy.

The proposed Interagency Panel on Advanced Science and Security (IPASS) proposed by the Administration grew out of such meetings as a response to Homeland Security Presidential Directive 2 Section 3. The proposed IPASS process is meant to increase the involvement of U.S. Government scientific experts to work with intelligence, counter-intelligence, and law enforcement representatives to advise the Department of science-related visa applications, beginning with students and visiting scholars. The White House (Office of Science and Technology Policy and the Homeland Security Council), the Department of Homeland Security, and the Bureau of Consular Affairs continue to convene meetings to work out details of the IPASS process. Members of the U.S. Government scientific community participate actively in these meetings, to the extent allowed by their level, if any, of security clearance.

The Department is in direct contact with the scientific and academic community regarding visa policies and procedures. In various briefings, we have explained the basis for the new security-related procedures and the challenges we face in today's world of protecting U.S. security interests while facilitating the travel of those coming to the U.S. for legitimate purposes. The Department is committed to working towards a continued free flow of people, information and ideas that is the foundation of this great country. Secure borders, open doors, that is what we are working towards every day.

Thank you Mr. Chairman. This concludes my statement. I would be happy to answer any questions.

Biography for Janice L. Jacobs

Ms. Jacobs became the Deputy Assistant Secretary for Visa Services on October 15, 2002. Prior to her arrival, she served two years as Deputy Chief of Mission at the U.S. Embassy in Santo Domingo. Her career includes a mix of Washington, D.C. and overseas assignments, including working in the State Department's Visa Office, Operations Center, and Office of Cuban Affairs.

Ms. Jacobs, a member of the Senior Foreign Service, joined the Foreign Service in March 1980 after many years of overseas experience as a Foreign Service dependent. She has lived in the Dominican Republic, Ecuador, Egypt, Ethiopia (twice), France, Mexico (twice), Nigeria, and Thailand. She received a BA in French and Education from Southern Illinois University in 1968 and a Master's in National Security Strategy from the National War College in 1995.

Janice is married and has two sons, Eric and Kurt. Eric is a Foreign Service Officer (third generation) and Kurt is an aspiring actor living in Chicago. Her husband, Ken, is a senior civilian personnel specialist with the Department of Navy. Hobbies include running, swimming, and biking. She speaks Spanish and French.

Chairman BOEHLERT. Thank you very much, Ms. Jacobs. Dr. Ward.

STATEMENT OF DR. DAVID WARD, PRESIDENT, AMERICAN COUNCIL ON EDUCATION

Dr. WARD. Good morning, Members of the Committee and Mr. Chairman. I am delighted to be here on behalf of the American Council on Education, which represents degree granting, independent and public universities.

I have been here before, and I want to say that today I don't want to spend a great deal of time discussing the value of international exchange both of students and scholars. I think this committee has shown great respect and understanding of that issue. Secondly, I am not here to argue about the necessity for security through a much more enhanced visa granting process. Both of these—I think there is broad agreement. And it is a question of making it work, I think, rather than seeing these as alternatives.

I would also in parentheses like to respond to Mr. Hall's comments about access of native students to our graduate programs in science and technology. My organization, in connection with higher education reauthorization, will address that issue. There is clearly a need to recruit more effectively from our own students, from our own high school and undergraduate students, as well as continuing to receive foreign students. That is the second issue, which I don't think the Committee is concerned about primarily today.

Much has changed in this country since September the 11th. Many of the policies and practices by which the U.S. welcomes international visitors and students are being changed. We support these changes. The Federal Government and colleges and universities need to make certain that international students and scholars come here with only the best of intentions and comply with all laws and regulations. But we fear that inconsistent and inefficient implementation of these new policies and procedures makes it more difficult for these students and scholars to complete their research and complete their studies in this country.

The Student Exchange Visitor Information System, or SEVIS, is the single most important step that the Federal Government has taken to improve its ability to monitor international students and exchange visitors. America's colleges and universities support its implementation; however, we have repeatedly indicated our concern that this system is being implemented before it was fully tested and ready for operation.

Sadly, our concerns have been justified. SEVIS was not ready, and our campuses are confronting difficulties. Let me be more specific. There are certain technological flaws in SEVIS. Schools have reported frequent data losses. Some schools have reported that their immigration forms have printed out on the computers of other schools, often hundreds of miles away. Batch processing, which is critical to those institutions with large numbers of foreign students,

has worked intermittently at best. And some students have not been able to access this feature at all.

Secondly, SEVIS does not, as it was intended, provide real time access. The system was designed to link schools, universities and colleges, the State Department, and the INS in real time. Delays can cause confusion of consular offices and embassies when students arrive to apply for their visas only to discover that their service information is not available from the system at the consular office.

INS has not provided adequate training to the full range of people involved. Clearly, a complex data system of this kind, which has both regulations to drive it and software to make it work in a technical sense, requires training. The INS has provided almost no training to campus administrators or even to its own staff. One campus official recently visited an INS regional Service Center and learned the staff did not know how to identify service documents and had not yet received training. INS then asked the campus administrators for assistance. Additionally, the service help desk only provides technical assistance about the system and is unable to answer questions about regulatory requirements. That, of course, leaves school officials with the great challenge of interpreting regulations without any clear guidance.

Two other issues make this situation a little more worrying. There will be a dramatic increase in the number of new entries into the service system. And that is—and secondly, there are no regulations yet about the collection of the fees. Between today and August the 1st, an estimated one million additional records will need to be entered as colleges begin processing admissions for the fall of 2003. Since the system was introduced, of course, the pace is fairly slow. It will now pick up, because this is the period for maximum application for admission in September. We don't know whether the capacity will be stretched to the breaking point by this sudden increase in volume, since with low volume levels it has obviously been struggling.

On the subject of the service fee, the Federal Government still has not published the regulations concerning how the fee will be collected. We understand that the fee collection process will be totally separate from the process by which students are listed in the service. And additionally, it may rely on traditional mail and paper receipts, undermining the original goal of creating a complete electronic system.

Delays in entry into the country have become quite common. In the last 18 months, visa delays to students and scholars have become more extensive. I don't think we worry about that, but they become unpredictable, too. I think there are really two quite different issues. One can deal with predictable delays, which can be understood by a logjam, but if there is unpredictability in the system and no rationality for why one visa is delayed and another is not, I think that unpredictability is a serious problem. We have already heard from my colleague from the State Department that their procedures have obviously greatly tightened up. And many, many more students are now flagged, and scholars for that matter, who are just coming for a few weeks, are flagged because of the fields of study that they're involved in.

We support that process, but we do have to recognize that there are significant delays involved in that. And some of these delays, in fact, are extreme. We do recognize that the State Department is working hard from its point of view to deal with that side of it. We are not convinced that on the SEVIS side we have exactly the same level of concern to solve these problems.

Many of our students are also further inconvenienced if they wish to return home either for a death, for a marriage, for a brief vacation or whatever, if they are here for three or four years. The process by which students return home and then need to re-enter the United States has also put many students in a great deal of fear, such that they don't want to leave the country because of the ambiguity that they will return for an oral examination, perhaps only for three or four days, before returning to their home country. There are many stories of great anxiety about that.

Some, of course, may be invited to conferences outside of the United States while here, maybe invited to Brazil even if their home country is France, England, or Sweden. This, too, is creating great apprehension, this great fear about leaving the country and then not being able to return.

I should emphasize we do not, in any way, object to the review of visa applicants. We seek a visa process that is timely and will take more time, but it is predictable. Moreover, we seek a process by which existing student and scholar visa holders can revalidate their visas before leaving the U.S. for academic, health, or other sensible, personal reasons.

We also have another broad area of concern, which is the issue of classified or sensitive courses. There are many, many more areas of study, which may come under a list, which would be prohibited for certain students from certain countries. Our feelings about this kind of issue is that if we have any doubts whatsoever, whether students from a certain country should be able to take a certain course, it would be better not to issue the visa in the first place. That kind of doubt should be kept outside of our borders rather than forcing the universities, in a sense, to select certain students out who might not, under certain circumstances, be able to go to certain courses. Imagine the identification problems of trying to deal with that.

I emphasize that the Federal Government rightfully should decide who receives a visa to study in the United States. International students and scholars, who are of concern to the government, should not receive a visa. However, since the U.S. economy is unquestionably fueled by innovations in science, engineering, and technology, it is important that our country remain the destination of choice for the world's best students and scholars. We value them, and I think there is increasingly, in many parts of the world unrelated to terrorism, who are feeling the pain and the hurt of not having free exchange with their colleagues in the United States.

I recognize that the Science Committee does not have jurisdiction over many of the agencies that oversee SEVIS and the issuance of visas for international students. However, the Committee could be helpful in encouraging the Federal Government and the agencies involved in SEVIS implementation and visa processing to imple-

ment several measures right now that would be helpful. Ideally, SEVIS should be evaluated and tested until all of the technical glitches have been resolved. But that isn't likely for security reasons, so we need a system that deals with the problems and tries to have a problem resolution rather than what, I think, too often occurs, a denial of the problems in the first place.

I have several recommendations, which are in my testimony. And I think rather than providing them at detail at this point, I will stop there, have you evaluate these at your leisure, and I would be happy to answer any questions. Thank you very much.

[The prepared statement of Dr. Ward follows:]

PREPARED STATEMENT OF DAVID WARD

Mr. Chairman, my name is David Ward and I am President of the American Council on Education. ACE represents 2,000 public and private colleges and universities. I am testifying today on behalf of those institutions as well as the 32 education and exchange visitor organizations listed at the conclusion of my testimony.

I have a deep professional interest in the issue that we are discussing today. As the former Chancellor of the University of Wisconsin–Madison, a major research university with 4,500 international students and scholars, I had the privilege of working with international students and scholars every day and saw firsthand the talents and skills they brought to my university. I am also personally interested in this issue—I originally came to the United States as an international student in 1960, earned a Ph.D. and then left, as my visa required me to do. I returned to the U.S. later and became a U.S. citizen in the Bicentennial year of 1976.

I believe that international students and exchange visitor programs are enormously beneficial to the United States. They dramatically increase the knowledge and skills of our workforce. They boost worldwide appreciation for democracy and market-based economics and give future world leaders first-hand exposure to America and Americans. At the same time, international education generates billions of dollars in economic activity every year.

The most important benefits of international students and exchange scholars cannot be easily quantified. But we know what they are. First, international students and visitors bring knowledge and skills to U.S. classrooms, laboratories, and businesses. The sum total of their intellectual contributions is enormous. For example, the rapid developments in information technology that helped fuel the economic growth of the 1990s benefited immeasurably from international students and scholars from Southeast Asia who studied at American universities in the late 1980s. In the same vein, a central feature of the advances in biomedical research that will pave the way for future gains in the quality and length of life are collaborative efforts between native and foreign-born researchers now taking place in thousands of American laboratories.

Second, international students and exchange scholars help bring greater international understanding. In the current global climate, we need more and better efforts to enhance international understanding. One of the best ways to do this is through the everyday classroom discussions that one finds on college and university campuses. Candid discussion enhances familiarity—and familiarity leads to understanding. When international students and exchange visitors return home, they take with them first-hand understanding of our country and our values. Indeed, some of America's strongest supporters abroad are those who have spent time in this country.

International students add diversity to college classrooms. For many native-born students, international students offer the first chance for a sustained friendship with someone born in another country. As the world grows ever smaller, meaningful exposure to international students will better prepare American students to live, communicate, and compete in the global economy.

This does not mean that the economic benefits are trivial. According to the Institute for International Education, the nearly 583,000 international students who visit this country purchase some $12 billion a year in goods and services. They do this when they pay tuition, rent an apartment, buy a pair of jeans, order a pizza, or go to a movie. Of course, like everyone else, international students and exchange visitors pay taxes on the goods and services they purchase. If they are allowed to work while they are here, they also pay Federal and State income tax.

According to the U.S. Commerce Department, higher education is the Nation's fifth largest service-sector export. In an era when many policy-makers and economists worry about our huge trade deficit, the presence of international students helps reduce it.

In short, the benefits of international students are unambiguous and overwhelming. So it is no surprise that President Bush has said: "The United States benefits greatly from international students who study in our country," or that he has committed his Administration to "continue to foster and support international students."

Secretary of State Colin Powell—no stranger to what is in America's international interests—says that international education "encourages and sustains Democratic practices, creates a cohort of future leaders who understand each other's countries from the inside, and promotes long-term linkages between institutions here and abroad." The list of foreign heads of state that have studied at an American college is long and distinguished. The State Department has concluded that fully one-half of the world leaders who agreed to support our war on terrorism first came to this country as an international student or exchange visitor.

The events of September 11th changed much in this country. Many of the policies and practices by which the U.S. welcomes international visitors have been the subject of examination and sustained discussion. A large number of changes have been put in place, including, the process by which international students and exchange visitors enter the country and are monitored while they are here.

We support these efforts. Colleges and universities are among the most open institutions in our very open society. The openness and the freedom that campuses provide individual students and scholars is one of the key factors in our widely admired system of higher education. To maintain this openness, we need to make certain that all potential students and researchers come here with the best of intentions, that they remain in compliance with all appropriate laws and regulations, and that we help the appropriate authorities monitor their academic activities and visa status.

But we fear that the inconsistent and inefficient implementation of these steps is making it more difficult to encourage international students and scholars to come to our country and to complete their studies, scholarship and research. I call the Committee's attention to several problem areas:

- Electronic monitoring of international students and exchange visitors who come to the U.S. does not work as promised;
- Extensive visa delays for students and scholars who seek to enter the country have become common; and
- Very real questions about what students can study or what scholars can investigate when they do arrive create confusion.

The new federal system for monitoring International Students and Exchange Visitors does not work as promised.

On January 1, 2003, the Immigration and Naturalization Service implemented the Student and Exchange Visitor Information System or SEVIS. This is a large and complex information technology system that is designed to link all U.S. embassies and consulates, all INS ports of entry, every institution of higher education that sponsors international students, and every exchange visitor program.

We believe that SEVIS is the single most important step that the Federal Government can take to improve its ability to monitor international students and exchange visitors and we strongly support its implementation. However, we have repeatedly indicated a concern that this system was being implemented before it was fully operational. Last fall, at separate hearings held by the House Education and the Workforce Committee and the House Judiciary Committee, the higher education community indicated that we did not believe that the SEVIS system would be operational in time for smooth implementation. The Department of Justice Inspector General also expressed doubts about the implementability of SEVIS at both hearings.

Sadly, as we feared, SEVIS was not ready and campuses are confronting enormous difficulties. The simplest way to characterize these problems is to say that the Immigration and Naturalization Service implemented this system before it was fully tested. Campus officials are now dealing with the failure to adequately develop this system.

SEVIS suffers from three serious problems:

First, SEVIS is technologically flawed. Schools using SEVIS report that it frequently 'loses' data that has been properly entered into the system. Many schools report that their immigration forms have printed out on the computers of other

schools. For example, official government immigration forms that Stanford University in Palo Alto, California, attempted to print were later discovered at Duke University in Durham, North Carolina; forms for Michigan State University appeared on the printer at Arizona State University. Most worrisome, perhaps, confidential SEVIS forms printed by the Jet Propulsion Laboratory—a secure government installation—were printed at a proprietary school in San Francisco. And batch processing, which schools need to submit large amounts of data, works intermittently at best. Some schools have not been able to make batch processing work at all.

These technological flaws can have serious consequences for students. One local university discovered that, despite repeated efforts, it could not successfully reactivate the record of an international student from Thailand into SEVIS after the student record was incorrectly terminated by the INS. INS officials told campus personnel they would address the issue. However, INS officials visited the student at home and, upon further discussion, arrested her and led her away in handcuffs.

Second, contrary to promises, SEVIS does not provide real-time access to data. SEVIS was designed to link schools, the State Department and the INS in real time. This is a reasonable goal for an electronic information system. Unfortunately, SEVIS does not yet provide these linkages in a timely fashion. For an extended period in February, no data was transmitted because the INS did not configure the system to transmit it and failed to do a manual transmission of the data for 10 days. Some embassies and consulates find that it takes a week or longer for them to access data entered into SEVIS. This means that students arrive at an embassy—sometimes after traveling a great distance—only to be told (incorrectly) that their data has not been entered into SEVIS and that they may not apply for a visa. In fact, their data is in SEVIS—that's the only way they could receive an I–20 form—but the SEVIS data has not been forwarded to the consulate. The bottom line is the same—without timely consular access to the SEVIS data, a student may not apply for a visa. These delays cause confusion and frustration for embassies, students and schools.

Third, the INS has not provided adequate training to anyone. Training is critical for the successful implementation of any new information technology system, yet the INS has provided almost no training to campus officials or even to its own staff. One campus official recently visited an INS regional service center and learned that the center did not know how to identify SEVIS documents and had not been provided with any training. The campus official was asked to help INS officials understand what they were supposed to do. Regional INS officials have not been adequately trained and therefore often provide different answers to the same questions. INS's SEVIS Help desk can answer technical questions about the system but is unable to answer regulatory questions. As a result, school officials are on their own.

Two factors make this situation even more worrisome. First, the volume of information in SEVIS is about to increase dramatically. Between now and August 1, we conservatively estimate that an additional one million records—approximately 250,000 per month—will need to be entered in SEVIS. We do not believe there is any chance that SEVIS will be able to accommodate this huge surge of information and are deeply concerned that it will play havoc with students, colleges, universities, and consular and immigration offices, alike.

Second, the Federal Government still has not published the regulations specifying how the SEVIS fee will be collected. Under the law, potential international students must be registered in SEVIS and they must pay a SEVIS fee. The government has not yet begun to collect the fee but there are indications that it plans to do so in the very near future. While no regulations have been published, we understand that the fee collection process will be totally separate from the process by which students are listed in SEVIS. Moreover, fee collection will reportedly rely on traditional mail and paper receipts and thus dramatically undermines the promise that SEVIS would be an entirely electronic system.

We have proposed ways to simplify the collection of this fee but federal agencies have been unwilling to consider them. We believe that adding a poorly designed fee collection process to a poorly functioning SEVIS system is a prescription for further disaster.

Delays Entering the Country Have Become Common

Because of the enhanced background checks and additional administrative procedures now being employed, it often takes far more time for an international student or scholar to enter the country. Prior to September 11, 2001, some visa applications routinely attracted closer examination than others. For example, some international students and researchers who hope to study or work in fields identified on the State Department's "Technology Alert List" have been subject to a higher level of scrutiny. In addition, individuals from countries that are known to sponsor terrorism have

long received more extensive attention from government officials before a visa is granted.

In the last 18 months, visa delays for students and scholars have become more extensive and unpredictable for several reasons. First, the State Department has increased the number of subjects on the Technology Alert List significantly. New fields added to the list include multiple sub-areas of the biological sciences, as well as community development, environmental planning, geography, urban planning, housing and landscape architecture. Second, last summer, the State Department imposed stricter procedures for visa applications flagged for review in the Visa Mantis process. Under the stricter procedures, a visa application that a consular officer refers to Visa Mantis must be reviewed by appropriate government agencies and must receive a security advisory opinion before a visa decision can be made. Prior to this point, some visa applications referred to Visa Mantis did not require a security advisory opinion. We understand that this increased level of scrutiny coupled with the expansion of the Technology Alert List, has been largely responsible for the enormous backlog of visa applications, estimated to be 25,000 last fall.

International students and scholars tend to be severely impacted by delays in granting visas for two reasons. First, their visits are most typically tied to programs with specific start dates. Students need to begin their programs at the start of an academic term. Scholars and researchers need to be on campuses in time to begin research projects and to begin teaching at the beginning of the academic term. International students and researchers and host colleges and universities rely on a timely and predictable visa process.

Second, international students and scholars travel outside the U.S. during semester or term breaks, to attend international academic conferences, to take care of personal affairs, or to visit family. Many students and scholars who have done so in the past 18 months have encountered enormous difficulties in re-entering our country. Increasingly international scholars and students already in the country are reluctant and refusing to travel outside of the U.S. for fear of being unable to return to complete their studies or research. In several cases, students who need only to defend their dissertation before receiving their Ph.D.s have found themselves unable to re-enter the United States. Visa delays have also made it increasingly difficult, if not impossible, for international scholars and researchers to attend short-term scientific conferences that are held in the United States. Having the world's best scholars attending international conferences in the U.S. benefits our nation in multiple ways. However, if significant numbers of foreign scientists continue to find that they are unable to enter this country in time to attend conferences, then conferences will be hosted in other countries instead. U.S. science and technology, tourism, and the economy would suffer as a result.

I should emphasize that we do not in any way object to careful review of all visa applications. We seek a visa process that is timely and predictable. Moreover, we seek a process by which existing student and scholar visa holders can revalidate their visas before leaving the U.S. for academic, health, or other personal reasons. This would significantly reduce the impact of visa processing delays because students and scholars would be able to continue their studies, teaching, and research uninterrupted while their visas are being processed.

Unclear what international students can study or scholars can investigate if they do come to this country.

Students and scholars who are granted a visa and enter the country now find themselves subjected to additional levels of scrutiny and restrictions. As noted above, the Technology Alert List that consular officers use in evaluating visa applicants, now encompasses virtually every area of contemporary science and engineering. Blanket areas like "civil engineering" have now been added to the list.

For the last year, the Administration has been working on a new visa review process for international students and scholars who seek to study in so-called "sensitive areas" as specified in Homeland Security Presidential Directive 2. Known as I–PASS (for Interagency Panel on Advanced Science and Security), its goal is to ensure that international students and scholars do not acquire 'uniquely available' education and training in the U.S. in sensitive areas of study with direct application to the development and use of weapons of mass destruction. We have not seen the details of this proposal, but we have some concerns that it could further increase the number of delayed visa applications and impede teaching and research.

In addition, we increasingly see new restrictions on publication of scientific research and on access to research and research results by foreign nationals. For example, usage of export control restrictions and talk of new categories of restricted information are growing. These new categories include: "sensitive but unclassified" and "sensitive technical homeland information." Certainly, the results of scientific

research with national security implications should not be in the public domain. It is our belief, however, that such research should be clearly labeled as "classified" research as called for under Administration policy. Current Administration policy on access to scientific information can be found in National Security Decision Directive 189 (NSDD 189). This policy, which is strongly supported by colleges and universities, clearly establishes that research is either "classified" or "fundamental." NSDD 189 was first promulgated in 1985 by President Reagan and it has been reaffirmed by every subsequent administration. While this directive remains in effect, its meaning has been lost or diluted in most departments and agencies. Indeed, we fear that NSDD 189 has been replaced by an ad hoc approach that makes it far harder for campuses and scientific organizations to understand exactly what research security protocol the government wishes to follow.

I emphasize that the Federal Government must decide who receives a visa to study in the United States. International students and scholars who are of concern to the government should not receive a visa. Speaking as a former university president and a devout supporter of international education and scientific research, I do not want any individuals on a college campus if the government has any reasonable concerns about them. I do not want them in our nation's classrooms, dormitories, laboratories, or libraries. I do not want them to have access to scientific equipment or even to extracurricular activities.

The U.S. economy is fueled by innovations in science, engineering and technology. Given the innovation-driven nature of our economy, it is important that the U.S. continue to remain the destination of choice for the world's best students and scholars.

Obviously in the new world in which we live, the government must put new security procedures and policies in place. We support these efforts and we have and will continue to work with the government to meet security needs. We understand it will take some time before new policies and procedures begin to operate smoothly. Some of these procedures appear counter-productive, unworkable, ad hoc and uncoordinated. As a result, costs associated with these new policies will be higher than desirable and necessary. We fear that some of the new policies and procedures may well make the Nation a less desirable and welcoming place for international students and scholars and this will force some students to choose to go elsewhere. The loss to our economy and our scientific enterprise will be incalculable and profound.

We recognize that the Science Committee does not have jurisdiction over many of the agencies that oversee SEVIS and the issuance of visas for international students and scholars. However, we think that the Committee could be helpful in encouraging the Federal Government and the agencies involved in SEVIS implementation and the issuance of visas for international students and scholars implement several measures right now. These measures would fix a number of the current and future problems of SEVIS by making it the system it is supposed to be, reducing the number of visa delays and making it clear that openness in research is the policy of the U.S.:

- State Department consulate offices should collect the SEVIS fee as a part of the visa collection fee. This maintains SEVIS as an electronic system and streamlines the process for the consular offices and for the international student.
- Campuses—specifically Designated School Officials (DSOs)—should be given broader access to SEVIS in order to correct clerical errors in the initial form. (For example, a field of study change, correction of gender, name spelling.) In one instance, a field of study change took 47 days to complete. These types of changes are minor and should not require direct involvement by the INS to correct.
- The State Department should use the SEVIS system to ensure real time access of data. Currently, the State Department runs the SEVIS data through their own system instead of using the secured Internet-based interface. In some instances, this has caused data loss.
- The Social Security Administration (SSA) should be granted access to SEVIS to allow SSA officials to verify information for work authorization before issuing Social Security numbers to F–1 and J–1 visa holders.
- With respect to openness in research, reaffirm and strengthen National Security Decision Directive 189 (NSDD 189).

Mr. Chairman, I would like to thank you and the Members of the Science Committee for holding this hearing on the development and implementation of SEVIS and the impact on education and research on U.S. campuses. I wish to assure you and the Members of this committee our strong commitment to the implementation

of SEVIS. But, to do this, we ask that our campuses be given the tools and the regulatory guidance to achieve this goal while ensuring that international student and scholars are not discouraged from study and research in the U.S. Thank you for the opportunity to testify this morning.

On behalf of:

Alliance for International Educational and Cultural Exchange
American Association of Community Colleges
American Association of Higher Education
American Association of University Professors
American Council on Education
American Dental Education Association
APPA: The Association of Higher Education Facilities Officers
Association of American Medical Colleges
Association of American Universities
Association of Catholic Colleges and Universities
Association of Community College Trustees
Association of Governing Boards of Universities and Colleges
Association of International Education Administrators
Association of Jesuit Colleges and Universities
Council for Advancement and Support of Education
Council for Opportunity in Education
Council of Graduate Schools
Council of Independent Colleges
Educational Testing Service
Hispanic Association of Colleges and Universities
NAFSA: Association of International Educators
National Association for Equal Opportunity in Higher Education
National Association of College and University Business Officers
National Association of Independent Colleges and Universities
National Association of State Universities and Land-Grant Colleges
National Association of Student Financial Aid Administrators
National Collegiate Athletic Association
National Council for Community and Education Partnerships
National Council of University Research Administrators
The College Board
United States Student Association
University Continuing Education Association

BIOGRAPHY FOR DAVID WARD

A leading spokesperson for American higher education, David Ward became the 11th President of the American Council on Education on September 1, 2001. Ward is Chancellor Emeritus of the University of Wisconsin-Madison, where he received his doctorate in 1963. Prior to becoming Chancellor at UW–Madison, Ward also served as Associate Dean of the graduate school from 1980 to 1987 and as Vice Chancellor for Academic Affairs and Provost from 1989 to 1993.

Ward's service to higher education includes the chairmanship of the Board of Trustees of the University Corporation for Advanced Internet Development, a non-profit group that spearheaded the development of Internet 2. He also has chaired the Government Relations Council of the National Association of State Universities and Land-Grant Colleges, and served on the Committee on Undergraduate Education of the Association of American Universities, the Science Coalition, and the Kellogg Commission on the Future of State and Land-Grant Universities.

During his four years as provost of UW–Madison, Ward led the development of a strategic plan that improved the quality of undergraduate education there; added to the campus research facilities; enhanced the connections between the university, the city, the business community, and the state; and creatively combined public and private support for the institution. These changes gave new expression to the Wisconsin Idea, the venerable philosophical framework for the university's role in public service and knowledge transfer.

BEST COPY AVAILABLE

Ward also held the Andrew Hill Clark Professorship of Geography at the university, served as Chair of the Geography Department from 1974 to 1977, and was President of the Association of American Geographers in 1989. As an urban geographer, he pioneered research on English and American cities during their rapid industrialization in the 19th and early 20th centuries, and held visiting appointments at University College London; The Australian National University, Canberra; Hebrew University, Jerusalem; and at his undergraduate alma mater, the University of Leeds.

American Council on Education

Office of the President

March 25, 2003

Honorable Sherwood Boehlert
Chairman, Committee on Science
U.S. House of Representatives
2320 Rayburn House Office Building
Washington, DC 20515

Dear Congressman Boehlert:

Thank you for the invitation to testify before the U.S. House of Representatives Committee on Science on March 26 for the hearing entitled *Dealing with Foreign Students and Scholars in the Age of Terrorism*. In accordance with the Rules Governing Testimony, this letter serves as formal notice of the Federal funding the American Council on Education receives. Please see the attached list for details.

Sincerely,

David Ward
President

DW/cms

Attachment

One Dupont Circle NW, Suite 800, Washington, DC 20036-1193
Telephone: (202) 939-9310 • Fax: (202) 659-2212

BEST COPY AVAILABLE

AMERICAN COUNCIL ON EDUCATION
FEDERAL GRANTS AND CONTRACTS SCHEDULE 1998 - 2002

Agency	FY 1998 Amount Received	FY 1999 Amount Received	FY 2000 Amount Received	FY 2001 Amount Received	FY 2002 Amount Awarded
Federal Bureau of Prison	$ 242,926	$ 378,580	$ 321,779	$ 386,347	$ 373,000
Department of Defense	$ 1,804,227	$ 1,825,396	$ 2,167,457	$ 2,304,085	$ 2,426,572
National Endowment for the Humanitie:	$ 33,076	$ -	$ -	-	-
Department of Education	$ 529,746	$ 755,950	$ 875,593	$ 550,689	$ 89,591
USIA	$ -	$ -	$ 40,941	$ -	$ -
USAID	$ 897,366	$ 1,397,655	$ 2,041,469	$ 4,599,992	$ 5,580,413
TOTAL	$ 3,507,341	$ 4,357,581	$ 5,447,239	$ 7,841,113	$ 8,469,576

Chairman BOEHLERT. Thank you, Dr. Ward. Dr. Tilghman.

STATEMENT OF DR. SHIRLEY M. TILGHMAN, PRESIDENT, PRINCETON UNIVERSITY

Dr. TILGHMAN. Good morning, Chairman Boehlert, Ranking Member Hall, and Members of the House Science Committee. I want to thank all of you for holding this very important hearing to consider the impact of the post-September the 11th changes in the international student and scholar visa program on research and education in the United States.

In my written testimony, I had discussed our experiences and concerns at Princeton in some detail. In my few minutes this morning, I would like to highlight just a few points from that testimony.

First, and most importantly, the events of the past two years have made all of us more aware of the need to consider the national security implications of our work and daily activities. Higher education and scientific communities have been responsive to the call to think carefully about security issues in our research laboratories. As Chairman Boehlert said so clearly a few minutes ago, in doing so, we are trying to balance two exceedingly important objectives: to minimize the risks that our laboratories and the materials that are contained in them will be used for terrorist actives, and to maximize the likelihood that the American scientific enterprise will continue to flourish, as it has for the last 50 years, to our great benefit as a country.

I am not going to repeat in my remarks many of the wise things that Dr. Ward said about the importance of the United States continuing to welcome scientists from outside the United States to train in this country, to take advantage of the best scientific education in the world, and to both stay in this country as well as to go back to their own countries and spread the value of American education system, the quality of our scientific education to improve their lot. As I think you know, a third of doctoral degrees in science and engineering are awarded in the U.S. each year to foreign nationals as well as 40 percent of the doctoral degrees in engineering and computer science earned by foreign students. I was one of those foreign students 25 years ago, and I have benefited enormously from the education I received in this country and the opportunity that I have had to practice science for the last 25 years in the country.

Of particular concern to me is the impact of our national policies and procedures on our capacity as a Nation to continue to attract the very best students and scholars from around the world. These individuals, by virtue of their quality, have options, have opportunities to study anywhere in the world. I really believe that if this country is to sustain its international leadership role in science and technology, it must continue to engage the very best students and scholars from around the world.

Let me briefly outline some of the concerns about our current procedures, many of them Dr. Ward has already mentioned. The first concern is with guidance that is currently provided by consular officials, making it almost certain that students and scholars with interests in science and engineering will experience difficulties, or at least delays, in obtaining visas no matter how non-

threatening the work is likely to be. In biology, my own field, for example, it would be a very rare applicant who did not mention at least one of the key words or phrases on the cheat sheets the consular officials have been advised to use in conducting their interviews.

At Princeton, we have advised our students to build in the time for delays, but even so, we have had a number of cases that have been very difficult to resolve. Other universities report similar delays, especially from individuals from Russia, China, and the Middle East who wish to study particularly in the physical sciences, computer sciences, and in engineering.

In some ways, as Dr. Ward just mentioned, we have an even greater concern for the students who have already begun their studies in the United States and then find that they have difficulty leaving the country, either to attend scientific meetings, or to visit their families, and then find that there are extended delays in their ability to re-enter the United States after their visits outside the country. This has the complication of interrupting their academic work, and because many of the graduate students are also teaching, interrupting their responsibilities for teaching at the universities. We would strongly recommend that a consideration be given to re-instituting a pre-approval or a pre-certification program that would allow these students to leave the country temporarily knowing that they will be able to return in a prompt and effective manner.

The proposed new IPASS system could address many of the problems with the current non-immigrant visa program by referring very sensitive cases to individuals with appropriate scientific expertise that could help distinguish between those who are going to study in areas that are likely to be sensitive from those who are likely not to be studying in those kinds of areas. It seems that IPASS is an opportunity, but it is also a risk that it will, instead of expediting visas, just give an opportunity to add another layer of review onto the process. Because we have very little information about IPASS, it is difficult at this time to judge whether it is in fact going to be a helpful or an unhelpful addition to the system.

I will not say anything about SEVIS. I think that Mr.—Dr. Ward has, I think, very clearly indicated the difficulties that individual universities are facing with SEVIS. It has been difficult for us to set this up. And we are a university that only has 1,200 foreign students all together: 350 at the undergraduate level, and about 850 at the graduate level. Nevertheless, we have had considerable expense. We have had to add personnel just to monitor this system. And we have run into precisely the same kinds of technical glitches that Dr. Ward has already enumerated.

Let me conclude by re-emphasizing that the higher education community understands the need for increased scrutiny, and we welcome and wish to work with the State Department, the INS, and the new Department of Homeland Security to develop a more effective and efficient screening procedure. Since we work on a daily basis with international students, we are in a position to understand both the needs of those students and scholars and the vulnerabilities of the current system. We look forward to learning more about the new Department of Homeland Security and its

plans regarding the student and scholar visa system, and we ask the Department to include us in the dialogue on these and other issues. Thank you.

[The prepared statement of Dr. Tilghman follows:]

PREPARED STATEMENT OF SHIRLEY M. TILGHMAN

Good morning Chairman Boehlert, Ranking Member Hall and Members of the House Science Committee. Thank you for holding this very important hearing to consider the impact of post-September 11th changes in the international student and scholar visa program on research and education in the United States.

The events of the past two years have made us all more aware of the need to consider the national security implications of our work and daily activities. The higher education and scientific communities have been responsive to the call to think carefully about security issues in our research laboratories. In doing so, we are trying to balance two exceedingly important objectives: to minimize the risk that our laboratories and the materials in them will be used for terrorist purposes, and to maximize the likelihood that the American scientific enterprise will flourish. America's economic, political and military strengths are rooted in its leadership in the worlds of science and technology and in the freedom of thought and expression that are at the core of our democracy and of our approaches to research and teaching.

As was so clearly articulated in the Hart-Rudman report, *Road Map for National Security: Imperative for Change*, a robust system of research and education is our greatest defense against terrorism. The report calls the current investment in research and development a "consumption of the capital" of the past three generations, pointing out that "the U.S. need for the highest quality human capital in science, mathematics, and engineering is not being met." It goes on to explain that:

> *"American students know that professional careers in basic science and mathematics require considerable preparation and effort, while salaries are often more lucrative in areas requiring less demanding training. Non-U.S. nationals, however, do find these professions attractive and, thanks to science, math and technical preparation superior to that of many Americans, they increasingly fill American university graduate studies seats and job slots in these areas."*

So, while we make national and institutional efforts to attract American students to careers in science and work to improve K–12 education to produce more Americans who have the capabilities necessary to excel in science and mathematics, we turn to international students and scholars to fill the widening gap between supply and demand for U.S. scientists and engineers. These foreign scientists and scholars make many critical contributions to the American scientific and education enterprise. They bring a wealth of knowledge and experience to our colleges and universities and they enrich the cultural diversity of our campuses. Given the global nature of business, the economy, education and the scientific enterprise, cultural diversity on our campuses pays important dividends to our entire society; it is imperative to the future success of our graduates and the international leadership and stability of our nation.

Foreign-born scientists have, for more than 50 years, helped the U.S. achieve the preeminence in science and technology that has led to our strong economic growth and long-term national security. Almost 20 percent of the distinguished scientists and engineers who are members of the National Academy of Sciences, and more than a third of U.S. Nobel Laureates, are foreign born. I, too, am a foreign-born scientist, having been raised and educated in Canada prior to my graduate studies at Temple University. According to the *2002 Science and Engineering Indicators*, nearly a third of the doctoral degrees in science and engineering awarded in the U.S. each year go to foreign nationals, with well over 40 percent of the doctoral degrees in engineering and computer science earned by foreign students. Two-thirds of foreign students who receive a Ph.D. in science or engineering stay in the U.S., taking positions in academia and industry, and nearly 40 percent of the current U.S. engineering faculty is foreign-born.

Despite the important contributions that foreign students and scholars have made and continue to make to U.S. advances in science and technology, we are all painfully aware that at least three of the 19 September 11th hijackers were attending U.S. flight schools on student visas when they committed their heinous acts. And we know from the 1993 bombing of the World Trade Center that others exploited weaknesses in the student non-immigrant visa program and were in this country on expired student visas when they committed their crime. In the wake of the Sep-

tember 11th attacks, there has been increased oversight of the student and scholar visa program resulting in new legislation and regulations in this area.

Most notable among the changes in the student/scholar visa program are: 1) expansion of the Technology Alert List (TAL) to include the biological sciences and urban planning as Critical Fields of Study; 2) guidance to consular officers that restrictions on the export of controlled goods and technologies (the TAL) apply to nationals of all countries and not just to those who are from state sponsors of terrorism; 3) guidance that consular officers are not expected to be versed in all fields on the TAL, but should "listen for key words or phrases from the Critical Fields list" while interviewing applicants; and 4) elimination of time limitations on decisions by the State Department to suspend the processing of a student visa request. Each of these changes has increased the number of cases that are referred to the State Department and other federal agencies for additional screening and security approval, and the increased case load has resulted in prolonged processing time for nearly all student visa applications.

While I understand the reasons behind these changes in regulations and enforcement, I am concerned about the lack of clarity in the regulations and the lack of training for consular officers to interpret them. For example, an October 2001 cable encouraged consular officers to post "cheat sheets" at interview windows so that staff can become familiar with the contents of the Critical Fields List. Consular officers are reminded that "restrictions on the export of controlled goods and technologies apply to nationals of all countries" and are told directly that they are not expected to be versed in all the fields on the list. Rather, they should "shoot for familiarization and listen for key words or phrases from the list in applicants' answers to interview questions."

In the category of chemical, biotechnology and biomedical engineering, for example, the Critical Fields List notes that "the same technologies that could be applied to develop and produce chemical and biological weapons are used widely by civilian research laboratories and industry" and that "advanced biotechnology has the potential to support biological weapons research." The list then goes on to name nearly every conceivable field and subfield within biology so that it would be almost impossible for a foreign national to describe his or her area of study without using several of the terms on the list, including biochemistry, bacteriology, microbiology, growth and culturing of microorganisms, genetic engineering, recombinant DNA technology, fermentation technology and immunology. The non-specific nature of this list and the obvious lack of expertise and training among consular officers raise serious concerns about the efficacy of this program and about our future capacity as a country to attract foreign graduate students and scholars to science and engineering programs.

While the higher education community fears that increased screening requirements and delays in the visa application process will have a significant negative impact on the recruitment and retention of foreign students and scholars, a look at the current data reveals that beyond a few difficult cases, the business of higher education has not yet changed significantly as a result of changes in the visa program. At Princeton, international students have accounted for approximately 43 percent of our total graduate student population last year and this year. (Since the size of our graduate student population has increased, so too has the number of international students.) Our undergraduate international student population has also increased over the past few years, from 6.0 percent in 2001 to 6.9 percent in 2002 and 7.5 percent in 2003. While we have had some difficulties at the undergraduate level, these students generally are not subjected to the same level of scrutiny as graduate students or scholars when applying for visas.

A recent survey of Ivy League universities revealed that some institutions experienced slight decreases in international graduate and professional student populations between 2001 and 2002, while others experienced slight growth. Even among those reporting decreases, it is hard to know how much is the result of real or perceived difficulties in obtaining visas. These data suggest that while individual students almost certainly have experienced difficulties—or at least delays—in obtaining visas, the overall number of international students at these institutions has remained relatively stable.

At Princeton, like many other U.S. universities, we find the largest concentration of international students in the sciences and engineering, along with a handful of other departments (in our case Economics and our Woodrow Wilson School of Public and International Affairs). In fact, Economics has the second largest concentration of international graduate students, following only Electrical Engineering and just ahead of Chemistry. Our international student population in the life sciences is relatively low (roughly 20 percent), but this is largely because of citizenship require-

ments for NIH graduate training grants, the largest source of support for our graduate students in the life sciences.

In general, Princeton has responded to changes in the visa application process by instructing international students to apply early and build in time for delays. Still, we have had a number of cases that have been particularly difficulty to resolve.

During the 2002–2003 academic year, two undergraduate students had difficulty getting their F–1 visas, but ultimately did receive them (although after the academic year had started). Among our graduate students, one engineering student was delayed by a semester (requiring an exception to our Fall-only admissions practice) and an Iranian Visiting Student Research Collaborator in chemical engineering has been waiting for over four months for a visa. Among our international scholars, a Russian and a Libyan-born British engineer experienced delays of several months in obtaining visas and a Russian physicist who applied for his visa in mid-January is still waiting for permission to enter the U.S. An Iranian chemist who applied for a visa in October never succeeded in obtaining his visa. Other universities around the country report similar delays for some of their students or scholars, especially among individuals who are from Russia, China or the Middle East and who wish to study in the physical or computer sciences or engineering.

In addition to students and scholars who must endure prolonged delays in getting their visas, institutions also have been coping with students and faculty who are already in the U.S. but who leave the country to attend professional meetings or family events abroad. These individuals are experiencing prolonged waiting times (six weeks to several months) when they try to secure the necessary visa to re-enter the U.S. During the recent winter break there were four engineering graduate students from Princeton who traveled abroad and had difficulty re-entering the country. Among the four, one (a Chinese student in physics) has returned, while three (a Malaysian electrical engineering student, a Chinese mechanical engineering student, and a Chinese civil engineering student) are still awaiting their visas to return. Our colleagues around the country indicate that they, too, are experiencing similar difficulties.

These cases of delayed re-entry are even more problematic than the delays experienced by "first-time" students and scholars because students or scholars who have already been in residence are generally scheduled to teach classes or continue ongoing research upon their return. Also, questions related to salary and benefits arise when students or scholars experience prolonged delays in obtaining their return visa, especially when the student or scholar is being paid and receiving benefits through federal research grants. For example, an international scholar may leave the country to attend a four-day meeting abroad, only to find that his or her re-entry is delayed by more than six weeks while the re-entry visa application is being processed. The individual may be able to use several weeks of vacation leave to cover time away from work, but the delay often exceeds the accumulated leave by many weeks. The most troubling cases involve international scholars detained outside the U.S. while their families—often including spouses who do not have permission to work in the U.S.—await their return in the U.S. These difficulties are exacerbated if salary must be withheld and benefits interrupted as a result of the re-entry delay.

In earlier times, a university could apply for advance pre-approval for international students and scholars who would be traveling abroad but then re-entering the U.S. This pre-approval allowed the student or scholar to undergo security clearance before he or she left the U.S., thereby minimizing the waiting time during the re-entry approval process at the foreign consulate. A similar pre-approval or pre-certification process for foreign students or scholars already in the U.S. would help enormously in reducing the re-entry waiting period and in providing scholars with much greater confidence about their ability to re-enter the U.S. after they fulfill their professional obligations by participating in scientific meetings and collaborations abroad.

H1–B Visas

Another area in which the university has been forced to change its practices and policies to accommodate prolonged screening and approval processes is in the H1–B visa program. Following September 11th, the processing time for H1–B visa applications has grown to four or five months. This means that hiring decisions and contract extension decisions have to be made far in advance to ensure that the visa will be processed in time for an H1–B worker to enter or stay in the U.S. Rather than make hiring and extension decisions based on our institutions' needs at a particular time or based on an informed performance assessment of an individual, we have to anticipate our needs and an individual's performance in advance so that we can allow adequate time for processing the visa. The INS does provide for expedited

H1–B visa processing when a $1,000 premium processing fee is paid, but this fee strikes many in the higher education community as unjust and inappropriate. Moreover, this practice extends the waiting period for those who cannot or choose not to pay $1,000 for premium processing.

IPASS

In May 2002, White House officials proposed a new international student and scholar screening program that would create a panel, the Interagency Panel on Advanced Science Security (IPASS), to screen some graduate students, post-doctoral fellows and scientists who apply for visas to study "sensitive topics. . .uniquely available on U.S. campuses." The panel would include representatives from the major U.S. science agencies as well as the State, Justice, Commerce and Homeland Security Departments. IPASS could solve some of the problems and deficiencies in the current non-immigrant visa program. For example, an IPASS panel made up of individuals with scientific expertise could better evaluate the potential for technology transfer than a non-scientist consular officer who is relying on a broad, uninformative list of terms to make that decision. Secondly, by sending the most difficult or questionable applications to IPASS, consular officers could process the less questionable applications more quickly, thereby reducing the backlog and delays for the majority of applicants. The creation of IPASS also provides an opportunity for the new Department of Homeland Security to work with scientific agencies and, we hope, institutions of higher education to develop a student and scholar visa screening program that could better differentiate between those with malicious intent and those who would contribute productively while in the U.S. We look forward to conversations with the new Department of Homeland Security on this and other issues in the near future and hope that IPASS will provide an opportunity for constructive partnership.

On the other hand, IPASS could add yet another layer of bureaucracy to an already burdensome process and the visa backlog could grow even longer. Even though the IPASS system was announced nearly a year ago, details of the program have not yet been released. Not only are university officials waiting to see what IPASS holds for them, but foreign students and scholars are similarly concerned about what restrictions and regulations this new program might entail. The absence of information about IPASS could dissuade excellent international students from applying to U.S. institutions for fear that this new system will impose additional burdens and delays. We know that other countries are working hard to develop higher education systems that mirror the U.S. system, and the more difficult we make it for highly desirable students and scholars to obtain American visas, the greater the likelihood that the "best and brightest" students and scholars throughout the world will elect to study and work in other countries.

SEVIS

The Student and Exchange Visitor Information System (SEVIS) is the web-based system that is being used to meet the Immigration and Naturalization Services (INS) information reporting and tracking requirements for foreign students. Although we have anticipated the system since 1996 when Congress directed the INS to develop an electronic system to collect data on foreign students, the implementation of the system was fast-tracked in response to the USA PATRIOT Act (P.L. 107–56, October 26, 2001), which required full implementation of the system by January 1, 2003. While Princeton is fully supportive of SEVIS and the transition from an outdated paper tracking system to an electronic format, there seem to be a number of serious bugs in the system.

The March 2003 report issued by the U.S. Department of Justice Office of the Inspector General provides an informative review of the SEVIS program and outlines the major difficulties associated with full implementation of the program. Rather than repeat that discussion, I will talk about our own experience in implementing SEVIS and using the system to track and report on international students and scholars.

In order to comply with the requirements of SEVIS, Princeton has spent over $38,000, including $15,000 to purchase software to facilitate batch transfer of data, $5000 for a new server, and thousands of dollars more for maintenance agreements, test servers and added personnel costs. While we thought that the implementation of SEVIS would be a "one time" cost, we are actually finding that SEVIS is far from being "plug and play" technology and we are seeing rising personnel costs associated with using the system. Implementing SEVIS on our campus required weeks of effort on the part of our Office of Information Technology, our Office of General Counsel, and our undergraduate and graduate international student services offices. Eventu-

ally, we had to assign a technical expert from our Office of Information Technology to focus primarily on maintaining our SEVIS reporting system.

Although the initial SEVIS program was fraught with software bugs and glitches, INS has been working hard to develop patches to fix the programming problems. But every time INS develops a new patch for its software, we have to wait for our batch processing software vendor to develop a corresponding patch that we must then install. At some point we anticipate that an upgrade will be necessary to the SEVIS system and that we will have to make an additional purchase of upgraded batch processing software.

Beyond cost, the implementation of SEVIS has been extremely frustrating to the people on our campus who work with international students and scholars. For lack of a better word, the SEVIS system is "quirky," especially when the user volume is high (afternoons are the most difficult since both East Coast and West Coast institutions are using the system). While the paper INS forms previously required 5–10 minutes to complete, the SEVIS system can take up to 30 minutes per individual, especially on days when the program is running slowly. Sometimes the system kicks the data entry person out just as he or she is about to complete the web-based form, and all of the information is lost. At other times the data entry person is interrupted by a phone call or a student while entering data and the system automatically logs the user out, requiring the user to log-in again and re-enter all of the data. Other institutions have reported difficulties retrieving their institutional data from SEVIS, sometimes receiving another institution's data during a retrieval attempt.

Beyond system difficulties, SEVIS also has some substantive deficiencies in that it is missing fields and options that correspond to certain INS policies and regulations. For example, institutions are allowed to provide a J–1 scholar with an extra six-month extension as long as INS is notified of the extension. However, in the SEVIS system institutions are required to request authorization of the extension from the State Department. Since the SEVIS procedure is inconsistent with current INS policy, either the policy must be changed or the SEVIS system must be corrected so that our staff know how to proceed. Also, while SEVIS provides a way to report practical training experiences for F–1 visa holders, there is no similar reporting field in the J–1 program for students participating in academic training experiences. Finally, there are some reporting functions that cannot be transmitted to INS as part of a batch data transmission due to gaps in the SEVIS software system. Information about transfer students, for example, must be entered manually for each student and cannot be transmitted to INS as part of a batch data transfer. While Princeton has no transfer students, we appreciate the hardships imposed by this software gap on institutions that do have a large transfer student population.

SEVIS provides customer support through users' guides and a help desk, but both have deficiencies. Our staff finds the F visa manual to be quite good, while the J visa manual is poorly written and missing key information. The help desk operates from 8 a.m. to 8 p.m. EST, but since there are only 32 people staffing it, the wait time can exceed 30 minutes. Beyond that, the help desk can only answer technical questions related to programming problems and cannot provide advice in the area of policy, regulations or procedures. Questions of this sort must be directed to the State Department, but sometimes the State Department staff members are unfamiliar with the capabilities of the SEVIS system. Since the most difficult questions have both policy and programming elements, the help desk should be staffed by individuals who are knowledgeable not only about the SEVIS software, but also about INS regulations and requirements.

In summary, I want to re-emphasize that the higher education community understands the need for increased scrutiny of those applying to enter our country on student and scholar visas. We would like to work with the State Department, INS and the new Department of Homeland Security to develop a more effective and efficient screening procedure. Since we work with international students and scholars every day, we are in a position to understand both the needs of students and scholars and the vulnerabilities of the current system. We look forward to learning more about the new Department of Homeland Security and its plans regarding the student and scholar visa system and we ask the Department to include us in its dialogue on this and other issues. We commend the State Department for its work in this area and are encouraged to hear that the Department is adding personnel and re-examining its procedures in an attempt to reduce the backlog and expedite visa processing while maintaining high security standards. While the backlog troubles us, we know that consular officers and State Department officials have experienced dramatic increases in workload and we appreciate their current efforts to reduce the backlog and expedite visa processing while improving national security.

Thank you. I welcome questions regarding my testimony.

BIOGRAPHY FOR SHIRLEY M. TILGHMAN

Shirley M. Tilghman was elected Princeton University's 19th President on May 5, 2001, and assumed office on June 15, 2001. An exceptional teacher and a world-renowned scholar and leader in the field of molecular biology, she served on the Princeton faculty for 15 years before being named President.

Tilghman, a native of Canada, received her Honors B.Sc. in chemistry from Queen's University in Kingston, Ontario, in 1968. After two years of secondary school teaching in Sierra Leone, West Africa, she obtained her Ph.D. in biochemistry from Temple University in Philadelphia.

During postdoctoral studies at the National Institutes of Health, she made a number of groundbreaking discoveries while participating in cloning the first mammalian gene, and then continued to make scientific breakthroughs as an independent investigator at the Institute for Cancer Research in Philadelphia and an adjunct associate professor of human genetics and biochemistry and biophysics at the University of Pennsylvania.

Tilghman came to Princeton in 1986 as the Howard A. Prior Professor of the Life Sciences. Two years later, she also joined the Howard Hughes Medical Institute as an investigator and began serving as an adjunct professor in the Department of Biochemistry at the University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School. In 1998, she took on additional responsibilities as the founding director of Princeton's multidisciplinary Lewis-Sigler Institute for Integrative Genomics.

A member of the National Research Council's committee that set the blueprint for the U.S. effort in the Human Genome Project, Tilghman also was one of the founding members of the National Advisory Council of the Human Genome Project Initiative for the National Institutes of Health.

She is renowned not only for her pioneering research, but for her national leadership on behalf of women in science and for promoting efforts to make the early careers of young scientists as meaningful and productive as possible. She received national attention for a report on "Trends in the Careers of Life Scientists" that was issued in 1998 by a committee she chaired for the National Research Council, and she has helped launch the careers of many scholars as a member of the Pew Charitable Trusts Scholars Program in the Biomedical Sciences Selection Committee and the Lucille P. Markey Charitable Trust Scholar Selection Committee.

From 1993 through 2000, Tilghman chaired Princeton's Council on Science and Technology, which encourages the teaching of science and technology to students outside the sciences, and in 1996 she received Princeton's President's Award for Distinguished Teaching. She initiated the Princeton Postdoctoral Teaching Fellowship, a program across all the science and engineering disciplines that brings postdoctoral students to Princeton each year to gain experience in both research and teaching.

Tilghman also has participated in teaching and other programs for alumni on campus and across the country on such topics as science and technology in the liberal arts curriculum, behavioral genetics and the human genome project.

A member of the American Philosophical Society, the National Academy of Sciences, the Institute of Medicine and the Royal Society of London, she serves as a Trustee of the Jackson Laboratory, a mammalian genetics institute in Bar Harbor, Maine. She has also been a trustee of Rockefeller University in New York, Cold Spring Harbor Laboratory on Long Island, a member of the Advisory Council to the Director of the National Institutes of Health and a member of the Scientific Advisory Board of the Whitehead Institute for Biomedical Sciences at the Massachusetts Institute of Technology.

Princeton University Princeton, New Jersey 08544-0015

President's Room

May 9, 2003

The Honorable Sherwood L. Boehlert
Chairman
House Science Committee
United States House of Representatives
2320 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Boehlert:

As per the House Rules, I am writing to inform you that I have no federal funding for research related to the topic of my testimony at the March 26th hearing on "Dealing with Foreign Students and Scholars in an Age of Terrorism: Visa Backlogs and Tracking Systems".

I appreciate the opportunity to testify on this important issue and am grateful for your continuing commitment to improving U.S. scientific research and education.

Sincerely,

S. M. Tilghman

Shirley M. Tilghman
President

DISCUSSION

Chairman BOEHLERT. Thank you very much. You know terrorism wasn't invented on 9/11 in New York and Washington. It has been around for a long time. Unfortunately, up until then, we escaped it on our shores, but it has been a fact of life in so many other nations for a long time. How are they coping with it in terms of student visas, visiting scholars? Do we have any comparative analysis? Dr. Ward and Dr. Tilghman, do your visiting scholars report that it is so much more complicated here than it might be in Germany, or the United Kingdom, and Japan, etcetera, etcetera? Could you address that question?

Dr. WARD. Yeah. I mean, I think most other nations have systematic arrangements and good data systems. I think the problem is that the scale is so different. The scale is manageable. We have a horrendous scale of immigration. Remember the visas that we are talking about are only 1.6 percent of all visas issued in the United States, but all of those visitors visas, too. So the sheer scale of visa processing is enormous.

The second thing I would argue is our system had broken down before 9/11. When I came to this country in 1960, it was a very effective screening process, which worked well between the State Department and INS. But during the period of the '80's, either because of under-funding, because of preoccupation with drug trafficking, will illegal immigration, INS was really not focusing on student visas, so it was a very badly broken system before 9/11 and needed to be improved. So it is A, scale, and in other countries, the scale is smaller. And B, they are never broken down. Our system had broken down irrespective of 9/11, and its scale is just so staggering. And to recreate it, the scale is proving to be a bigger problem than we expected.

Dr. TILGHMAN. I agree with what Dr. Ward said.

Chairman BOEHLERT. Let me ask you, Ms. Jacobs, for most visa processors that—is their first assignment abroad someplace? What is the buzz within the consular office community? Are they being excessively cautious now because of some potential personal liability?

Ms. JACOBS. I think it would be safe to say that after 9/11 that consular officers in the field are perhaps more cautious than they were in the past. I think that that same thing applies, though, back here at home with the agencies reviewing these cases. I mentioned in my testimony that the number of refusals for technology transfer grounds has increased. But I think it is fair to say that in the post-9/11 environment that consular officers looking at the Technology Alert List that we give them, looking at the sort of definitions that we give them to guide them, because these are not scientific experts, and we do have to give them some kind of guidance on what they should be looking for. I think that if they have a question about a case, that they probably do refer it back to Washington. We are, as you know, under a lot more scrutiny after 9/11. And I think that the consular officers in the field are feeling that and feel that they have an obligation to do that.

Chairman BOEHLERT. Do you have any specialized training you have added to their program?

Ms. JACOBS. They get training on this as they go through our consular training class on all of the different grounds of ineligibility under the Immigration Act. And they do spend some time talking about this and the Technology Alert List and what it means. Let me just say that officers, and many of them are, as you said, sir, first tour officers. But at the larger posts, at least, many of them do have people there that they can talk to if they have a science attaché. There may be others at post that they can talk to about a case, if they do have questions, which might eliminate the need to send something back here for a clearance. But I would say that certainly the numbers coming back for clearances, at this point, the numbers have increased over the last 16 to 18 months.

Chairman BOEHLERT. If they have a science attaché. That is another story for another day. We shouldn't have an embassy any place in the world that doesn't have a science attaché for a whole lot of reasons, but that is another subject for another day.

What is your prognosis for the backlog?

Ms. JACOBS. I think the backlog is the result of a number of things that happened, more or less, at the same time. I think the fact that we had to implement a lot of these security procedures on very short notice. As I mentioned before, in ordinary times, we would look at a problem and try to do things slowly so that they make sense. After 9/11, we were under a great deal of pressure to implement a lot of security measures very quickly. And the—I think the resources of all of the Washington agencies involved in this process were strained. I think that most of the agencies have now at least added additional resources. There are, I think, a lot of automation issues, a lot of, perhaps, outdated technology issues that come into play. But I think the simple answer is that we simply—the infrastructure was not there at the beginning to handle this. We are sorting through it now. I think we are doing much better. But there is a group of cases from, I want to say, early summer of last year where a lot of cases were held up because of changes of—in procedures, changes in personnel, and we are still dealing with a certain number of cases from that time period. But the cases that are coming in today, especially the Visas Mantis cases, if there is no problem, if we have no, you know, negative information from another agency, we can get those processed within 30 days.

Chairman BOEHLERT. So you feel we are making significant progress?

Ms. JACOBS. I think we are making progress. I—in some areas, I think it is significant. In others, we still have a ways to go.

Chairman BOEHLERT. My time is up, but I will have a second round of questions. Mr. Hall.

Mr. HALL. Ms. Jacobs, I don't have any problem with your problems. I want you to be thorough. And I lived in a day and time when your State Department, my State Department, moved the Japanese away from the West Coast here. Perhaps if they had had the information that we have today about computers or had Tom Ridge leading the Homeland Security with the information that he has, much of that would have been done more on a personal basis, rather than on just categorizing everybody with the same sweep of the same brush.

Today, you have a delay. There is no question about that. I don't think there is any question that it is 9/11 spawned that that caused us to be in terror. And Roosevelt, back in that day and time, said the only thing we had to fear was fear itself. Well, we live in fear today in this country. We live in fear, because our government tells us at any moment that we might be hit again with an act of terrorism. And of course, we have to believe that. I would like to believe what we are doing is working, because they look at my card twice, get the dogs after it once, then the mirror, and then they make me show my ID. And we have not had an event since that time, so perhaps you and your State Department are doing a great job for us. I hope that, and I believe that, and I want to believe that.

But I must ask you that is this situation the result of new policies, the slowness there, or procedures that have been instituted after 9/11? Obviously they are.

Ms. JACOBS. Yes, I—primarily because of all of the new procedures that were implemented after 9/11, just the sheer volume——

Mr. HALL. Yes.

Ms. JACOBS [continuing]. Of cases coming back now for review.

Mr. HALL. And as the Chairman suggested, we have been terrorist friendly for probably the last 15 or 20 years here, or maybe longer than that. So that places a terrific burden on you. And but are we seeing a temporary effect as the system adjusts to the new ground rules that you all are setting out, or is this likely to become a permanent situation?

Ms. JACOBS. We are doing everything we can to keep this from being a permanent situation. The State Department really is committed to trying to balance the responsibilities that we have to protect borders, but also to facilitate legitimate travel. And we certainly—we have met with the scientific and academic communities. We have talked about this. We really do understand their concerns. I don't think anyone involved in this process wants this to be a permanent situation.

Mr. HALL. Then if it is not—if it is temporary, of course, we would want to know what steps are being taken to streamline the visa requests and all of that and to rush it up. I am not doing that. That is not my hope nor my goal for you. I am glad that it is permanent, because I think it is going to be permanent. I think we can learn that from another country that has that permanent situation today. If it is permanent, has an assessment been made of the tradeoff between increased security and potential harm to the research and innovation capabilities of the Nation, or I guess maybe I could ask it another way. Dr. Ward told us what he wasn't going to go into, but let me tell you what I do want to go into. How can we lessen the classroom seats that are occupied by foreigners today and yet keep our nation abreast in the field of technology and science along with the intervention of the State Department and the guidelines you are setting forth? Are you carrying that—are you putting that in your computer as you go?

Ms. JACOBS. Well, we are responsible for processing visas in accordance with the Immigration and Nationality Act.

Mr. HALL. And with the rules we make up here in Congress.

Ms. JACOBS. And you know, if someone is ineligible under one of the grounds of the Immigration and Nationality Act, then yes, we have the ability to deny the visa. But we wouldn't be able to deny a visa just to slow down the process.

Mr. HALL. Well, Dr. Tilghman indicated that she was not upset with the percentage of foreign participation. I am and many Americans are. Many Americans who have sons or daughters that they think are qualified can't get in because those seats in those classrooms are occupied by foreigners. And surely, that is of some benefit to this country. I understand that. I understand it is a—we send students there. They send students here. I think 50 percent in the field of engineering is unreasonable, and I think that is a goal we ought to be trying to—a spear that we ought to be trying to blunt. And I hope the State—I thank you for what you have done in the State Department, and I don't disagree with your progress. I don't disagree with the time it is going to take. I want you to be thorough. I yield back my time.

Chairman BOEHLERT. Thank you very much. The Chair recognized the distinguished Chairman of Subcommittee on Research, who has a vital interest and support in the subject. Mr. Smith.

Mr. SMITH OF MICHIGAN. Mr. Chairman, thank you, and Mr. Hall, for having this hearing. We have had sort of some questions in our Subcommittee on Research as we reauthorized the National Science Foundation. And as we discuss the 200 million authorization to try to do a better job with our math and science students in this country. So sort of following up on Mr. Hall, you know, in the long-term, it seems like each one of our universities would consider it a priority to try to figure out what we are doing wrong or what we could do better in terms of our math and science interests and education from the four-year-old on up to the time they graduate from high school and go into college and sometimes get thrown out. Particularly, I mean, we have some of the great people in Michigan and other states, Dr. Tilghman, were foreign students that graduated and decided to stay in this country are, at Michigan State University, our Dean of Physics and Engineering, I think it is called, is—was a foreign student that came and did research. So I want to ask the question, Ms. Jacobs, on—after they finish their doctor's degree, then I am told there is extra pressure for them to leave the country. And how does that play into consideration of flexibility in the Department—in your Department?

Ms. JACOBS. The student visas are considered a non-immigrant visa, which means that for most of those applicants, there is a statutory presumption that they are intending immigrants until they present sufficient evidence to the consular officer of—that they are going to leave the United States after their authorized stay. And so that provision does apply to students. And so when they come in for their student visas, one of the things that the consular officer has to take a look at is this person going to come back after completing the studies in the U.S. As you can imagine, that is no easy task. Things change when people get here, etcetera. But it is something that the consular officers do have to look at. And if there is——

Mr. SMITH OF MICHIGAN. But do I understand you to say what they are looking at is do you promise to leave this country after you finish your education sort of——

Ms. JACOBS. They would. Yes, they would look at that. They would try to look at within the context of the local, you know, economic social conditions. You know, is this person going to be able to, you know, study this particular field and then come back and, you know——

Mr. SMITH OF MICHIGAN. What do you mean come back? Come back where?

Ms. JACOBS. Go back home to find a job.

Mr. SMITH OF MICHIGAN. See, I want to look at it a little more selfishly. If these are exceptional individuals that can help us either in the university level or in research and in commerce, I would like to keep them here.

Ms. JACOBS. Many of them are able to stay. They are able to find a way to adjust to another status. Some of them marry American citizens, which allows them to stay. I mean, there are a number of things that can happen, but until that——

Mr. SMITH OF MICHIGAN. Well, Dr. Ward, can you—maybe you need to help facilitate those marriages.

Ms. JACOBS. But——

Mr. SMITH OF MICHIGAN. Put your mike on.

Dr. WARD. Oh, sorry. On the—I married a U.S. citizen, too, so I suppose I am an example of this. But I came on an exchange visitor visa, and that had a statutory necessity to leave. So I—just there are some visas where there is virtually no negotiation about leaving. On a student visa, I think under certain circumstances, the employer can make a case that the student can stay. So there are—it depends on the particular visa the foreign scholar comes in on.

Mr. SMITH OF MICHIGAN. Is that right, Ms. Jacobs?

Ms. JACOBS. Yes. There—as I said, there are ways for people who come in with student visas to say. And with the exchange visitors, Dr. Ward is correct. There are certain categories of those exchange visitors that do—are supposed to go home for at least two years after their program——

Mr. SMITH OF MICHIGAN. 4,000 schools that now are educating 600,000 foreign students. It seems like that message should be so very clear that we have got to do a better job in this country of exciting our students in science and math rather than simply continuing our dependence, if you will, on foreign students and—yes, Dr. Tilghman.

Dr. TILGHMAN. You know, in—and Mr. Hall is about to leave, but I was about to both agree and disagree with him on the issue that he raised and that you are raising, Mr. Smith. I couldn't agree more that we are not doing a good job as a country at science education at exciting the young, K through 12. I think it is scandalous, actually. And I think it—the direct result of this is not—is that foreign students compete very effectively for spaces in our class. I mean, this is a meritocracy. When we do admission into graduate school at Princeton and at many other research universities in this country, we are selecting the very best qualified, most excellent students that we can find. And the fact of the matter is, because

of the quality of the science education that is occurring in this country, foreign students compete very effectively for those places. It needn't be so, but it is so right now. So when you and Mr. Hall are focusing on why are we admitting so many foreign students, the answer is because they compete well for the places. They are of extraordinary high quality. I think it goes all the way back to K through 12 education.

Chairman BOEHLERT. Your time is expired, but you are exactly right, and this committee takes great pride in recognizing the miserable performance of the United States of America in educating young people, K through 12, in science in math and inspiring them. And so if you had to depend exclusively on domestic students to fill your graduate schools, you would have an awful lot of empty seats. And one of the alarming trends right now used to be, and I will just pull this figure out of thin air, but it illustrates the point. It used to be that about a 70 to 30 ratio, the graduate students that came to the United States from abroad got their Ph.D.s, 70 percent went back home. 30 percent stayed. Now it is just the reverse. You know what, that is cause for alarm. That is cause for real alarm. With that, the Chair recognizes Ms. Eddie Bernice Johnson.

Ms. JOHNSON. Thank you very much, Mr. Chairman, and Ranking Member. Let me thank the witnesses for coming and express my appreciation for both Dr. Ward and Dr.—the President of Princeton for giving your talents to this country. We are a nation of nations. I looked around this room trying to see if I could find any Native Americans, and I don't think I see any.

I understand what we are talking about, and I think that the challenge is with our education system, because it really is a sad day when we use visas to make sure that we don't have any terrorists aboard. We have had terrorists in this country all of my life that were not foreign-born, and so we have got to do a better job on the other side of the issue. I have real problems with the visa time span, because I have a district that is probably the most diverse in the Nation. And we have a lot of H1–B Visas, a lot of students, just from all over. And it is absolutely inefficient in what they have to deal with and standing in these lines and getting visas and trying to get a citizenship. Efficiency is not noted as anything that I can give any compliment to when the INS had control of it. I had to visit several times myself to see what the problem—three and four years, that is too long. And I don't believe that we would have as much research since 85 percent of the researchers in this country are foreign-born. That is not their fault. It is ours, and we must do a better job.

I really do support some type of screening, but we can not get it until we get more efficiency. We need more people in the area, and we need more skill of the people that are in the area. I am grateful to both of you for coming and adding to our education system. I don't know who would be President of Princeton if you weren't there, and you are not American-born. I am very—I have such a personal experience with this in my district, that this is really kind of disturbing to me. I have a lot of people who have been profiled since 9/11. If we had more efficiency, I think it would not have been 9/11 in that fashion. So I think the responsibility really does rest with us. And I am not for holding students back

if they are efficient, but I am for better preparation of students so they can become efficient. And I think I can speak with authority being black-skinned. If they had the right opportunities, they would qualify. When we put students in special situations and they have an opportunity to learn, they learn.

So my question would go to the State Department. Will the State Department work to ensure that the memorandum or understanding between the Department of State and the Department of Homeland Security reflect the proper balance between the need for security and the need for openness? We are a Nation of nations.

Ms. JACOBS. We are certainly working toward that as we discuss the MOU with the Department of Homeland Security. Let me just add that there are a number of other agencies involved in this visa review process, and we have talked to all of them about the need for a more rational, a more predictable clearance system so that we can stop the delays that we are having.

Ms. JOHNSON. Thank you very much, Mr. Chairman. I appreciate you holding this hearing.

Chairman BOEHLERT. Thank you. I understand in my enthusiasm I misspoke a moment ago. What I meant to say was that of the foreign-born students who come to the United States and get their graduate degrees, it used to be that 70 percent would stay here and 30 percent would go back home. Now it is almost reversed, which is creating a real alarming deficiency right here in the United States. We are trying to address that, starting with K through 12 with the science and math partnership, which was an initiative of this committee, starting with the other partnership program. We are working with our great universities to provide incentives for you to increase the number of students in the science, math, and engineering disciplines. It—this is a national security problem of monumental proportions, and most people are not getting a heck of a lot of attention outside the campus community and the Corporate America, which recognizes that we have some real unmet needs, and we have got to do something to address that.

Dr. GINGREY. Oh, sorry. Mr. Rohrabacher is here. We can't skip the distinguished Chairman of the Subcommittee——

Mr. ROHRABACHER. Thank you very much. And considering that I am again going to be the proverbial skunk at the lawn party that I think I would like to get this into the discussion a little earlier. No, this is not a meritocracy for our students to be competing with foreign students. American people pay a lot of their tax dollars into the education institutions that we are talking about. Their students—you know, their children do not have to compete on an equal basis with people from overseas who do not pay taxes for educational institutions, thank you. Fifty-four percent of all of the Ph.D.s in science and mathematics and engineering in this country go to non-nationals.

Now we are all talking about this being a big problem, and that is a big problem. But just suggesting, "Oh, we have failed. Let us spend more money on the education level of K through 12," is not the answer. And you have to take a look at the science and the—of mathematics and—or excuse me, economics that has led to this. And it is not just a lack of training at the bottom level. We have a perverse incentive system in this country. We have a perverse in-

centive. If somebody gets a degree in—a BS in science and somewhere or engineering or—and one of these areas, mathematics, they can be gobbled up at a very good pay level by private industry. And it does not—it works against them in making a decision to go on to get a Ph.D. and to further their education.

What happens with the foreign students, on the other hand? In some other country, the pay that they are going to get with a BS degree is going to be far less than what they will get if they continue their education. And in fact, if our students continue their education, they get very little help. They end up with a truckload of debt. And these foreign students often have some of the—some of their fees that our own students have to pay waived or taken care of by different grant situations. We have got to change that economic situation. It is just not a matter—I mean, I—every time—I have been here for 15 years, and every solution is, "Let us spend more money for lower education." Well, that is not an easy answer here. We have got to come up with some other things. I would suggest—for example, my office is looking into the idea of suggesting that people who go on to get their graduate level degrees and their Ph.D.s in science and engineering should, perhaps, have that paid for by the government in exchange for working for the government for every year we help them through school. I mean, NASA could help that, Mr. Chairman. NASA could use that very much. And thus we could bring down—the idea, the goal should be bringing down that 54 percent so that Americans are filling those slots. And again, I don't look at it as meritocracy. We have many students here, foreign students, who come from non-Democratic countries, who are potential adversaries of the United States.

Let me ask Ms. Jacobs, are we training, are we allowing students from Pakistan and India into the United States to get Ph.D.s so they can be equipped to make nuclear weapons? I think the answer is yes, is it not?

Ms. JACOBS. Those are just the types of people that would be subject to the—one of the clearance processes that I talked about.

Mr. ROHRABACHER. Well, my guess is—well, up until now, that has not been the case. And I hope that is corrected. But I know that there are people from Communist China—there are scientists swarming over Los Alamos lab, and many of them—when the Chinese start building rockets efficiently enough to hit any American city, we can start blaming this open exchange that we have had between scientists and our universities. Now there is a national security relationship here that really needs to be looked at. And I think that it goes far beyond—I mean, we like to give us this easy answer about spending more money for kids in the lower grades, and that is just not where it is at.

Let me mention a couple of other things to you here. Ms. Jacobs, in the past, there has been no verification, is this correct, whether—we know the students are coming in, and you are talking about the backlog of students coming in, but what about the students going out? I am more interested in the legal immigration problem, which we have got in California, where students of all kinds come in and then we don't even know—legally, and then we don't know if they have come back, is that right?

Ms. JACOBS. I think for the most part, that is correct. The new Department of Homeland Security is developing an entry/exit system to track people coming here and also this new SEVIS system for tracking students should help in that regard.

Mr. ROHRABACHER. So just a note that we—our system, as it is working right now, a student can come in from a country that has many potential terrorists and maybe a country that is friendly itself, the government is friendly, let us take Egypt where we know that they have got some radical Islamic people there. And they could come in on a student visa, and we wouldn't even know if they left, as it stands right now, isn't that correct? We need to correct that, Mr. Chairman. And that is—I think some of the folks who flew the planes into the buildings fit into that category. So again, let me just reiterate—I will just say that our goal should be to make sure that Americans are filling these slots in our higher universities, getting the Ph.D.s in science, and let us try to make it economically possible for them to do so. And I am certainly—I know that the Chairman has paid a lot of attention lately to the NASA requirements that we need to get top quality people in NASA, younger people. Maybe we can work that in a way that will help these young people get their education.

Chairman BOEHLERT. Thank you very much, Mr. Rohrabacher. We will have another discussion another day about K through 12 and the critical importance of investing more there, but I am glad to see you have signed up in support of our scholarship program to incentivize science, math, and engineering majors in college to——

Mr. ROHRABACHER. I would note that I have cosponsored that with you.

Chairman BOEHLERT. Public education. And I am glad to see, and I will tell Dr. Caldwell that we have signed you up, too, for increasing the NSF fellowship stipends, which are desperately needed.

Mr. ROHRABACHER. But we need some government service in exchange for that.

Chairman BOEHLERT. And you and I are working on something with NASA that will provide scholarships just along the lines you are talking about. So this is a very complex issue. And it requires a multitude of approaches to solve the problem. But we can't ignore a very basic fact of life: in international studies, when our youngsters in the fourth grade are compared with their counterparts around the world in science and math proficiency, they do about average. By the eighth grade, they begin to fall back, and by the twelfth grade, sad to say, we are down around 14 per 50. That is not good enough. If we don't start with the youngsters at the beginning and inspire them and incentivize them and provide the best possible faculty, then we are never going to get them to fill those vacant chairs at our great universities like Princeton. Princeton would welcome an overflow of applicants from American citizens who want to come to the Ivy hallowed halls of that great campus. Unfortunately, they are just not getting enough applicants. With that, Mr. Wu.

Mr. WU. Thank you, Mr. Chairman. Before I get to my question, I share with my good friend from California a deep concern about

national security and having the best students possible that we can in America and providing every educational opportunity we can for Americans and for people from around the world. I do have to say, however, that this requires a balance, and it requires a careful balance. And when we go overboard in a search for security, sometimes we damage our own national security. If it had not been for the steps that Germany took in the 1930's and Italy took in the 1930's, we would not have been able to get the very able scientists that we did get in our nuclear program, the Manhattan Project. And that was thanked substantially to social programs, shall we say, in Germany and Italy and elsewhere in Europe, which were countered to their own security interests and thank God, which were helpful to ours.

We are not strangers to being harmful to our own national interests. The Chinese scientist, who is the father of the People's Republic of China's rocketry program, was in the United States and was driven out of the United States by McCarthyism and was of great assistance—has been of great assistance to the rocketry program in the PRC. That was an unfortunate step, which this country took, and I would hate to see that we engage in a pattern of conduct now, out of fear, which would damage our national interests and help our adversaries. It takes a careful balance, and I would encourage this committee, this Congress, to proceed with that kind of balance.

I just want to put in one plug for a bill, which Congressman Cox of California, and I submitted together in the last Congress on H1–B Visas. And it addresses some of the concerns, which the gentleman from California mentioned, which is to give additional educational opportunities to students who are already here in the United States. As businesses bring in new individuals on H1–B Visas, the bill would require them to pay a fee to universities in an amount equivalent to the then authorized amount of a grant for purposes of financial aide for students in the United States. So the system is bring one in now for a temporary fix, help educate someone here for a long-term fix. And we intend to bring this legislation up again. I think it is something that is positive—a positive step forward in the H1–B program.

My question for the panel has to do with the appropriate body for enforcement of our immigration laws, because it is my concern that educational institutions are, in many respects, uniquely unsuited as enforcement agencies. I think that they have to cooperate in providing information, and that is necessary and proper, but it seems to me that other agencies, law enforcement agencies, the newly reconstituted INS—when I was young and first in America, we used to go down and report at the post office. But some form of commonly available reporting site that is used to handling law enforcement and processing papers seems to be a more appropriate place for enforcement. I would like the panel to respond to that, please.

Ms. JACOBS. I would just say that I completely agree with you, and I think most universities are very loath to put themselves in a position where they would be in the enforcement business. What we can do is provide all of the information that the enforcing agen-

cy needs, but for us to actually do the enforcement I think it would be virtually impossible.

Dr. WARD. Yeah, I would agree with that. It is obviously the State Department should defend our borders in the way that is being described here and that the INS should deal with any infractions that occur from a policing point of view in the use of the visa. The area that we have actually expressed the deepest concern is being the idea of prohibiting certain students from certain countries from going to certain courses on our campuses. And the practicality of trying to do that, and many of us have simply said, "Look, we regret having to do that. We would much rather these students not arrive in the first place if we are being forced to police which classes they go to."

So I agree, but I also think that one of the challenges here is to be slightly upbeat, if SEVIS would work, quite frankly, it would be an absolutely dramatic improvement, because we have the State Department, universities, and INS appropriately connected. This is an interagency communication challenge. And many of these delays are where we have got different entities trying to communicate with each other, some of them doing a good job, some of them doing an indifferent job. And I think the real challenge here is the system is—the system was broken before 9/11. We are trying to recreate a system. We need to recreate a system, but it is a very complicated process, and the expectation is of a perfect outcome in less than nine months of planning I think was greater than we should have anticipated. What I hope is that we can have a dialogue as a result of these hearings, particularly I think with Homeland Security, where I think many of the problems really lie, so that the scientific community and the security community can come together to talk to each other to solve these problems. The communication structure is currently not working well.

Mr. WU. Thank you.

Chairman BOEHLERT. The gentleman's time has expired. Mr. Gilchrest. You have got a couple—we have got six minutes and 50 seconds left, so——

Mr. GILCHREST. I will do it in one minute, Mr. Chairman.

Chairman BOEHLERT. Mr. Gilchrest, you are recognized.

Mr. GILCHREST. When the students go here in the United States and they get a break, they want to go home for a holiday, for a funeral, or whatever, it has been my experience that that is very difficult. But there seems to be no real clear statute, because sometimes we get them back just by a phone call either to Vermont, I am from Maryland, or to Baltimore. So is there a very specific and do we need to fine tune that so it is a little bit more clear if they go home for a break or they go home for some special event, they can come back because they are still attached to the university?

Ms. JACOBS. One of the things that we are trying to work out with the other agencies involved in these clearances is a way to make those clearances valid for a certain period of time, so that would allow us that——

Mr. GILCHREST. I see.

Ms. JACOBS [continuing]. For people to go and——

Mr. GILCHREST. That is good.

Ms. JACOBS [continuing]. Come back.

Mr. GILCHREST. When someone applies for a visa to come to the United States and have to show, you know, a tourist visa or some other type of visa, they have to show that they are financially able back home, otherwise they don't want them to come into the United States with that visa. Does the same thing apply for a student visa?

Ms. JACOBS. For student visas, what we are primarily looking for is to make sure that they have the funding to cover the educational costs in the U.S. But we would also be looking for other indications of ties to that country that would—

Mr. GILCHREST. Sure.

Ms. JACOBS [continuing]. Have them go back home after their studies.

Mr. GILCHREST. We—the—I guess I am not going to ask any more questions about the SEVIS program, but I guess if we can get that thing a little bit more efficient, my staff tells me it is a disaster. So I guess that means there is a little bit something wrong with it. Thank you, Mr. Chairman.

Chairman BOEHLERT. Thank you, Mr. Gilchrest. We have to recess and answer a call to the House. And Dr. Tilghman, I understand you have to depart. I would ask you and Dr. Ward, we are going to give you a written assignment. We can do that on occasion. But——

Mr. HALL. Can I make a statement to Ms. Tilghman?

Chairman BOEHLERT. In one moment you can. We would like to ask you what you think on a practical basis we can do to improve the visa situation. And then when we get what you give us, we are going to share that with Ms. Jacobs and have her respond. And we will share the response with you. The Chair recognizes the distinguished gentleman from Texas, Mr. Hall.

Mr. HALL. From a standpoint of levity, I would say to all three of you who are very intelligent and very educated, I have read your background, I respect you and admire you. I just don't like you, because you are the very type that almost busted me out of school, because they graded on the curve.

But Ms. Tilghman, I go through Princeton—I didn't go through Princeton, but I go through Princeton about once a week on my way to McKinney, Texas, just about five miles north of Princeton. God bless you and thank you.

Chairman BOEHLERT. Thank you all very much. We will be in recess for approximately 15 minutes. Ms. Jacobs, Mr.—Dr. Ward, can you stay?

[Recess.]

Chairman BOEHLERT. We will resume. Dr. Gingrey.

Dr. GINGREY. Mr. Chairman, thank you very much. I almost went out of turn just before we broke to vote, but I am kind of glad that Mr. Rohrabacher went first, and he described himself as the skunk in the lawn party, and I was going to play that role. And I appreciate his comments.

Dr. Ward, and also the President of Princeton, maybe she had to leave, you know, I want to mention a couple of things and then ask for anybody's comment, particularly maybe Dr. Ward's. But I think the Ranking Member, Mr. Hall, was right on point in regard to the issue of the percentage of students in our universities that are for-

eign, a preponderance, really, of students. And Mr. Rohrabacher spoke to it as well. You know, what I am concerned about is that the—our universities, for different reasons, maybe it is athletic in some instances where students, foreign students are recruited. And they take positions that maybe our United States citizens students, whose families, for generations, have been paying taxes and working hard and going through our state—our public education system. And yet they may just be a step away, just a step below some of the applicants that we are talking about here, the brightest and the best that are coming from other nations.

I suggest to you that, not to get too much into athletic analogies, but if our university football teams, the starting line on offense, if they average 290 pounds each rather than 330, or all of the skilled players could run the 40 in 4.6 rather than 4.4, we, the spectators, would hardly note a difference. Now my son went to a petty school just down the road from Princeton University, but he was not able to get in Princeton, and it may be that he was just a step away. But he has gone on and been a very successful graduate of Georgia Institute of Technology, and I am proud of that. But I—my point is, you know, I think the concern that Dr. Tilghman and Dr. Ward have expressed about the brightest and the best and the difficulty in getting them quickly into our universities needs, at this point in time, to take a back seat to our concern about national security.

And I, as a Member, am not particularly concerned that there is a little bit of more red tape and a little bit longer waiting period, and that the universities who recruit these students, and sometimes student athletes, for their own purposes, have to spend a little bit more time on due diligence to make sure that they are abiding by the INS rules or whatever. So I think that it is almost like 15 years ago when we had a great concern about healthcare in this country. And all of a sudden, we had 180-degree swing from indemnity plans to managed care and HMO. Gradually, that pendulum is shifting back, the patient bill of rights and other concerns over abuses.

I would say to the—those who are concerned about the waiting time and the red tape, it is time for a little patience. You know, we are at a point in time in this country where our security is more important that your convenience. And I know that is a bit of an overstatement, but I would just like to throw that out there. As I say, I realize I am a bit of a skunk at the lawn party, but I would like to hear your comments on that.

Dr. WARD. I think your comments are well taken. And I think I have stressed in all my testimony this issue of balance and that we are not really complaining about security but that the SEVIS system, which we have supported consistently in higher education, is not working well. And that is our concern that if it is just perverse ineffectiveness that is part of our security blanket, that is not a good idea. Let us make it work well. So our complaints here are not about the necessity of security, which we agree with, but the way it is being implemented just seems to be unpredictable, which I think is a problem, and sort of lax in the tradition of a business-like attitude in trying to do it. So I agree that patience, in terms of delays under security are reasonable.

I think it is the unpredictability and what seems to many of us, perfectly fixable, manageable, businesslike practices that could be brought to bear on this, and then perhaps also improve communication between different agencies. I think, for example, higher education does seem to have worked out a communications structure with State and with the Office of Science and Technology Policy. It has been much harder for us to develop one with INS where we understand what is being expected of us. Sometimes the regulations are so unclear that we don't know how to behave in a way that INS would want us to behave. So I would agree that there has got to be some patience and there will be some delays, but I think the experience of SEVIS and the need to improve SEVIS is really almost independent. In fact, if it was improved, it might be better for security.

On your second point about foreign students, I do want to stress that in aggregate, they actually pay for themselves that while some do come and receive support, usually the very best of them, and who often could go to other countries, as you probably know. We often compete for the best with the European Union, Australia, and New Zealand. And there is a marketplace. And in fact, that marketplace may begin to resolve our problem, because there is no question that Australia is now subsidizing many of the foreign students who once came here, and in some cases, actually paid their way.

So there is now an international market developing in trying to get access to highly qualified, undergraduate scientific talent where the U.S. will no longer have a virtual monopoly on it. So we have to—that is something that we can weigh, and it may be a good thing for those who want to see, you know, more access for Americans. It could be a bad thing in terms of access to quality out there.

But I do want to stress that in the aggregate, the—we make money on foreign students. It is not—the taxpayer is not paying for this. There is a billion-dollar gain to the economy, not only through the tuition they pay for the services they render, the business of their parents, and it is, I think, around a $12 billion industry. The foreign student is an industry. So while that doesn't justify the access of foreigners versus domestic students, it is wrong to assume that the taxpayers are picking up the bill. In fact, the $12 billion input to the U.S. economy, I am sure, makes it, in fact, an industry. And that is why Australia wants it.

Dr. GINGREY. You—I didn't explain it very well. You may have missed my point. I know you are making money off of them. There is no question about it. You are talking about grants to the universities or you are talking about trips to the NCAA Final Four. You are making money of them; there is no question about that. But my point is that these American students, the United States citizens who have been paying the taxes and that went to our public schools and, you know, they miss the opportunity. I am not—I wasn't suggesting that it wasn't—the program wasn't paying for itself. Indeed it is. I am sure in the athletic programs, in particular, it is all about the program paying for itself with these investments in foreign athletes.

Dr. WARD. Well——

Chairman BOEHLERT. The gentleman's time has expired. Ms. Lofgren.

Ms. LOFGREN. Thank you, Mr. Chairman. First, I would like to ask unanimous consent to put in the record an editorial and news article from the San Jose Mercury News about this very subject that I think Members will find interesting.

Chairman BOEHLERT. Without objection, so ordered.

[See Appendix 2: Additional Material for the Record for the information referred to.]

Ms. LOFGREN. You know, in many ways, listening the to questions and answers reminds me that this issue is a little bit like the elephant. It depends on which part of the body you are touching, because there are differences between the types of foreign students that are coming here. Clearly, the foreign students who were terrorists at the flight schools were one category of students. There are fly-by-night university, there is mediocre university, and then there is the MIT engineering department. And they attract different types of students from around the world.

What I would like to focus in on, and I was glad, Dr. Ward, that you mentioned that this is actually a moneymaker for American schools. I mean, I am a taxpayer. I have got two kids going to college—or my son is just about to join, but the foreign student tuition is very high for state schools. And the University of California makes money off of their foreign students. But I have a concern that we are losing out at the very highest level of quality students, the students who have a rare intelligence who are recruited by MIT, by Stanford, by Harvard, by universities in the EU. They don't need to come here. They can go other places. And if they go other places, that has implications for our economy that are not good ones. If you take a look at Silicon Valley, where I am from, and go into any of the cutting edge technologies, it is a virtual UN of the smartest people that have been produced by their various countries. And we were lucky that they came here to become Americans with us and get their inventions patented and get the economy moving. That is a lot different than, you know, a roomful of people punching out code in the back room that are more or less fungible. I am talking about those rare individuals. And because of our old visa, which is—needs to be updated, in my judgment, those outstanding individuals get lumped in with everyone else on H1-Bs when in fact it is a category that is different.

I am concerned about the delays. I am concerned about inefficiencies in this system. And I have long believed that if we had better technology, we would be able to get ahead of some of this—these issues. So Ms. Jacobs, I am interested, if you could go through—do you have—do your officers have access to SEVIS online in their—out in the field in the various consulates?

Ms. JACOBS. They have access to SEVIS, all of the data that INS—the former INS puts into SEVIS is given to our consulate posts abroad. We do that through an interface that we have that includes information on all of the visas that we issued or denied around the world. But yes, when that information is given to us, it gets out to the field.

Ms. LOFGREN. And that is—and they have access to their own—in their own computer terminal in their consulate offices? That is

good. Is there any paper given? If I am a student, and I am coming in to get my F1 Visa, am I—is there any paper exchange or is it all online?

Ms. JACOBS. Most of it is online. Actually, the main purpose behind SEVIS is for us to verify the documents that the student presents. We can check that to make sure that, yes, the school issued that I–20, yes, this is the person it was issued to. That is the main purpose. So it is a little bit of both.

Ms. LOFGREN. Now the INS is still creating paper records on some of these visa issues. How do you interface with the INS when they are creating actually microfiche or paper records?

Ms. JACOBS. We share—this database I was talking about is actually shared with immigration at the ports of entry, so that when these students come in, if they need to be checked again for some reason, the people in the secondary can actually pull up that information right on their screens to check to make sure, yes, this—the visa was issued to this person.

Ms. LOFGREN. But it is no database if it is a paper record that you can—how do you cope with that issue when the INS is producing paper or microfiche?

Ms. JACOBS. Well, to the extend that we can automate things and share it with them, I think that is pretty much how we are addressing it right now.

Ms. LOFGREN. I see. I have a concern and a question. I—last summer, Chairman Sensenbrenner and I, different—separate days, went over and met with Ph.D. candidates in engineering at Stanford, and they were great kids and really smart. And they said, "You know, we are here, too. We want to be safe. So we don't know why you want to investigate us, but fine, investigate us. And we will go in, and we will meet with whoever you want and tell you everything, but can we get a visa so we can go back and forth?" Because they can't go to conferences in Germany. They can't go anywhere, because they will get stuck abroad if they are from the Middle East. And actually I think these kids were so far into their Ph.D.s that they will probably stay, but we are going to lose those—their younger brothers and sisters to competing universities in Canada or Europe. Can you envision a system where you can take—you could review students and really get a level of confidence and then pre-approve them or give them a multiple entry visa so that you know you wouldn't have to worry about that group?

Ms. JACOBS. Many of them, actually, I think, do have multiple entry visas, but for the ones that are subject to these——

Ms. LOFGREN. Well, these were—many of these were from—Iranian students.

Ms. JACOBS. Uh-huh. One of the things that we are trying to work out with the other agencies that are involved in this process is to see if we can't make those clearances valid for a certain period of time, so that that would allow the students to do just that, to go back and come—return.

Ms. LOFGREN. If I would, there is another problem, which is many of these students have been here as undergraduates as well, and actually, there is nothing to find out about them in Iran. I mean, the only—you know, it is domestic. If you want to look at them, every contact and every—they have grown up in America as

students. And doing the study in their home country, where they were born, really yields no information whatsoever about them. So really, we are not even safe the way we are approaching this. I thank the Chairman for his diligence.

Chairman BOEHLERT. Thank you very much. The Chair now recognizes Dr. Bartlett, who will assume the Chair, and for his five-minute question period.

Dr. BARTLETT [presiding]. Thank you very much. There is an old adage that says it is an ill wind that blows no good. And I would like to mention a positive aspect of the problem that we are talking about today, and that is the fact that I guess more than half of the students in these technical areas are not citizens of this country. This represents, of course, an enormous vote of confidence of the world in the quality of our educational institutions, does it not? There are lots of educational institutions they could have gone to. They chose to come here. So that is a real positive aspect of this.

But I would hope that our schools would be so crowded with our own qualified students that we would say, "Gee, thanks for applying, but there is no room for you here. You need to go somewhere else," and that is not the case. And I would like to talk about that for just a moment. As our nature of industrial power, as you know, we spend a smaller percentage of our GDP on basic research than any other power. We also spend a smaller percentage of our money on R&D than any other major economic power. The fact that most of the students in these departments are foreign students is, in the short-term, a threat to our economic superiority. We will not continue to be the world's premiere economic power if we don't turn out the world's best scientists, mathematicians, and engineers in adequate numbers.

I worked eight years for IBM. I left there, and they help me set up my own company in 1975, so that tells you when this happened. But we were concerned at IBM that we were going to lose our superiority in computers, and the United States was going to lose its superiority in computers if things didn't change to Japan for a very simple reason. Every year, Japan was turning out more and sometimes better scientists, mathematicians, and engineers than we did in large enough numbers that there is no way we, at IBM or the United States as a whole, could continue to hold the edge in computers if that continued to be true. In the longer run, this is another type of national security threat.

The major reason for being here today is to talk about the national security threat that is presented by students who might apply to our schools. But in the long run, we will not remain the world's superior—supreme economic power. We will not remain the world's only superpower if we do not turn out the world's best scientists, mathematicians, and engineers in large enough numbers. So I am very concerned that for the short-term our economic superiority is at risk with the longer-term our military superiority is at risk.

Now you tend to get what you appreciate. And in this country, the young people that go into these pursuits are really not appreciated. The pretty girls won't date them. They are called "geeks" and "nerds" when I was going to school. And I have a Ph.D. in science, so I can speak from personal experience. When I was going

to school, we were called "squares." I guess that is an old term now. But you know, when the White House will summon a group of superior of science, mathematics, and engineering students to the White House to reward them the way we call a winning athletic team to the White House, then I will believe that we are sufficiently appreciating of these young people, which are really enormously important to our future.

And my concern is what do we need to do in this country to capture the imagination of our people and inspire our young people to go into careers of science, math, and engineering. For far too many years now, our young people have chosen to go into careers where, at a minimum, you—a few people in those pursuits could be considered commensals on our—with our society. But they soon become parasitic, and I think today they are clearly parasitic in our society. And these two pursuits into which most of our bright young minds are going are political science and law.

Now you know, we need some really good people in political science and law, but we sure as heck need a whole lot of really good people in these engineering and scientific areas. What can we do to capture the imagination of our people and inspire our young people to go into these pursuits?

Dr. WARD. That is a question for me. I think that there are multiple answers. One of them, I think, clearly is what I was hearing earlier, some incentives by—from scientific employment that if you provide incentives for undergraduate, particularly undergraduate. The big breakdown is high school and undergraduate science education. Right at the beginning we seem very strong. Right at the end we seem very strong. Even, in spite of being significant numbers of foreign students, the native students are also very good in those classes. So the real issue is there is a supply breakdown. And my view is that I think there is obviously the powerful symbolism of governors, leaders of industry, recognizing scientific and technological talent. But maybe real money would help. And I think it is at the undergraduate level. That is where the breakdown occurs to help people who have a tough time with calculus, a tough time with physics and chemistry, and maybe move off to areas that seem, to them, extensively a little easier. There has got to be an undergraduate science incentive program, and perhaps also summer programs for high school students in the sciences. So there has got to be something which deals with this pipeline where in the rest of the world, they manage to maintain a larger number of people committed to mathematics, physics, chemistry and to a less degree, biology than we are really able to do in our system. And yet, at the outcome and at the beginning, we are fired. And so I think it is a matter of incentives that are needed.

Dr. BARTLETT. Thank you. You tend to get what you appreciate, what you reward. And I think that we need to show these young people that not only is there a good job available to them, but we really appreciate them in our society. I don't think we are doing a very good job of that now. I just had a son who graduated with a Ph.D. in chemical engineering from Carnegie Mellon, so you know, I went through it a generation ago, and now he has just gone through it. And so I am pretty familiar with what goes on in these schools and spent 24 of the best years of my life teaching.

Let us turn now to our next questioner, Mr. Bell.

Mr. BELL. Thank you very much, Mr. Chairman. I would like to echo the statements of some of my colleagues who have spoken previously, specifically Eddie Bernice Johnson of Dallas, who sees this whole situation regarding visas and people having trouble getting back into the country as a very serious problem for her district, which is located in Dallas. Ms. Jackson Lee and I both represent areas in the Houston area, and it is a very serious problem in our districts as well.

I see this as sort of the situation of the pendulum swinging, necessarily so, after September 11. Our world did change. New security precautions had to be put into effect, and I think all of us understand that. But what we are seeing now in the Houston area is a situation where the pendulum has, perhaps, swung too far, and we need to take steps to correct it. I agree with Dr. Ward that the expansion of the Technology Alert List has contributed to a serious backlog of visas. I think you mentioned in your statement an estimated 25,000, and Ms. Jacobs, if you have any reason to differ with that later, I will certainly give you an opportunity.

But what is even more troubling, to me, is the number of students and researchers who travel outside of the United States, as we have heard today, albeit for academic, health, or personal reasons and then encounter great difficulty re-entering the country. This delay in visa renewal and adjudication not only hinders critical scientific research and progress, but it effects the patients under the care of these stranded physicians.

I want to draw your attention to a specific instance. Back in the Houston area—we have heard several specific instances from different parts of the country today. Let me draw you to a situation in Houston, which occurred at the University of Texas Health Science Center. As we speak, there are two young doctors stranded and unable to return to the University of Texas after visiting relatives, one in Pakistan, and the other in Iran. And as I understand it, the delay is due to "administrative processing". Now I am still unclear as to what "administrative processing" means. Ms. Jacobs, again, I am going to give you a chance to explain that a little bit later. But it sounds like a great deal like bureaucratic Neverneverland, one of those places that—a place a person goes and never really gets a serious answer as to why their application is not being processed.

UT and the Baylor College of Medicine are warning their international researchers not to travel because they don't know how long it will take for their visas to be revalidated. Currently, there is no procedure in place to expedite the process on any grounds, including emergencies. And as Dr. Ward, I believe, stated in his testimony, we must come up with a process by which existing physicians and researchers can revalidate their visas before leaving the United States for academic, health, or personal reasons.

This issue, obviously, has a flip side to it: patient care. Since 9/11, the Texas Medical Center and various medical centers across the United States, have seen a decline in international patients. M.B. Anderson, a world-renowned cancer treatment center located within the Texas Medical Center, has taken the lead in a joint task force, along with many other institutions across the Nation, includ-

ing Duke University Medical Center, Memorial Sloan-Kettering, and UCLA Medical Center, just to name a few, in addressing the issue of international patients' access to care in the United States. It is through the suggestions and implementations of this working task force that these world-renowned research institutions can maintain their status as world leaders in medicine, particularly in periods of heightened international tension, and maintain, at the same time, their humanitarian responsibility to the global community.

I urge my colleagues, especially those with major hospitals and research institutions in their districts, to join this collaborative effort to address this problem. It is my hope that we in Congress can come together and develop a pragmatic and expedient solution to this problem. I am committed to working on it now, as I hope many others are, for time is of the essence. And Ms. Jacobs, while I still have time, if we are willing to commit our time and effort to fine tuning this process, can you assure us that you will do the same? And what are some of your plans to expedite this process, commonly referred to as "administrative processing" that I mentioned earlier in my statement?

Ms. JACOBS. The—I am happy to try to address all of those issues. The administrative processing is a term that is often used by the consular officers in the field when someone is subject to one of these clearance processes that I talked about earlier rather than calling it a name check or going into the details that we have worked out with the other agencies back here. We have always tried to put it in those terms, because it really is processing that has to take back here, and the posts are really not involved in that after they notify us or send in the clearance request.

For our part, the State Department is working extremely closely with the other agencies involved in this process. We have tried to work with them on technological issues on trying to make this whole process more automated. We have worked with them on trying to get, you know—have them get additional resources to process these cases. In the case of some agencies, they actually—they have done that. It is working much more smoothly now, because we have a system in place where we know that if we don't back from them within a certain amount of time, that it is okay, we can go ahead and issue the visa.

But we are very, very committed to trying to—I mentioned earlier that a lot of these procedures were put into place in a hurry after 9/11, because we were really under pressure to do that. And it is time now, and we are doing that, to look at these to try to make them as streamlined, as rational, and I think what is probably the most important, predictable as possible. And I am very committed to continue my work with that in doing that, and I think the rest of the people in the visa office who work on these issues are dedicated, as well, to that goal.

Mr. BELL. Thank you, Mr. Chairman.

Dr. BARTLETT. Thank you very much. The Chair now recognizes Ms. Jackson Lee. Oh, Mr. Honda was here earlier? All right. Ladies before gentlemen.

Ms. JACKSON LEE. First of all, I want to thank the kindness of the Chairman and the kindness of the distinguished gentleman

from California. And I want to join and associate myself with my distinguished colleague from Texas, my multiple colleagues from Texas, Congressman Johnson and Congressman Bell, coming from different cities.

I have a dual responsibility in this Congress. I serve as a Ranking Member on the Immigration Claims Committee and have watched this process now for a very long time, particularly after 9/11 when I think it should be noted for the record that a high percentage of the hijackers came in on student visas. And as we well know, the visa process is a bifurcated process, but the issues of visas is still through the State Department, even as we have merged immigration responsibilities under Homeland Security. But I think I was one of those who advocated that the State Department retain the responsibilities of granting visas.

As I say that, let me also say that even during this time, I have indicated that immigration does not equate to terrorism. And I believe it is appropriate for this Science Committee to look at several issues. And I think it has awakened many members on the question of K through 12 and what we are doing in training our very own students and encouraging them and providing the excitement that is needed to choose a world of science, which I believe that science creates the work of the 21st century and centuries to come. And at the same time, I think it is crucial that we monitor the agencies of government that our civil liberties are protected, but as well that honest and thoughtful and important work is not stymied and stifled and medical research is not stymied and stifled because of the fact that we are looking to protect our own homeland security.

Mr. Bell represents the medical center, but many of us in Houston have components of the medical center in our Congressional District. I have the honor of serving on the Prostate Cancer Advisory Committee at M.B. Anderson, a hospital that has benefited, not only from the talent here in this country, but from the enormous research talent that has come to help save lives here in America. The testimonies of individuals who walked into that hospital and said that I was clearly almost DOA. Because of some of the enormous research, the cutting-edge research, the front-line research, this individual, or many individuals that I have heard speak, have been able to live life anew.

So my question to the remaining witnesses, and I appreciate the presence of the President of Princeton. We have several institutions in our respective districts that rely upon the outstanding talent of international specialists, scientists, and professors. This does not take away from this committee's responsibility to fight like heck to get our young people right in line with the excellent education that we have here and have them become the scientists of the 21st and 22nd centuries alongside of their colleagues and friends internationally. But I need to hear from the State Department as to what we can do. We will be having a hearing in our Committee, Judiciary, on student tracking, which these universities are now facing. And of course, we will be hearing a lot of concerns about that. But I pointedly want to ask about what we can do in Congress to assist you in balancing the responsibilities of one, getting the talent, but not having the very unfortunate incident that oc-

curred in the Washington Think Tank when one of the professors, either from India or Pakistan—not professors, but researchers. And I believe it was in New York, literally stopped on the streets and his colleagues in the Think Tank or at the particular research entity were wondering what had happened to him: had he been kidnapped? He was stopped in his tracks and accosted by our law enforcement officers, and this was a gentleman who was here for research purposes and dialogue.

This is not a good image. What can we do? The Science Committee has one concern. I am sure the International Committee has—National Relations has one concern, Judicial has another concern, but what can we do to enhance the line of security versus a welcoming friendship to those who would bring talent and interest to this nation? I ask both Dr. Ward and Dr. Jacobs.

And might I just—as you answer that, just to—as a side note, my enthusiastic support to H.R. 1297, which is not your responsibility, but it has to with honoring the Columbia seven, and I was not here. And it was marked up, and I just want that for the record. Thank you.

Ms. JACOBS. On the visa side of your question, there is something that Secretary Powell has often said, I think in testimony here on the Hill and in other places, that what we are really trying to accomplish, secure borders and open doors. He is extremely committed to that, as are the rest of us. I have talked a lot about the steps that we are trying to take to make these clearance procedures that are in place as rational and streamlined and transparent as possible. We will continue to work with the other agencies involved. Some of the things that you mentioned, I think it was a Pakistani professor, that has more to do with the program, which is a registration for foreign nationals already here in the United States. And that is controlled by now the Department of Homeland Security.

But I think all of us—I don't think there is anyone involved in this process who is intentionally trying to keep legitimate visitors, scientists, academics, other people out of this country. It—our goal is just the opposite, to try to recognize those people, to recognize the people who are not a high risk to this country and let them come in, because I think we all appreciate the need for that free-flow of ideas, of information. And certainly, this country is based on that, and that is something that we continue. It is a value. It is a national interest that we continue to support. And so if the pendulum swung fairly high on the security side after 9/11, I think it is slowly coming back, and I think that all of us working together can get that proper balance.

Ms. JACKSON LEE. I thank you. Is Dr. Ward allowed to answer, Mr. Chairman? Is Dr. Ward——

Dr. WARD. I have very little to add. I would just say that perhaps the challenge is sometimes the culture of INS, in the days before it went to Homeland Security, was often confused between what I call enforcement and service. When you deal with immigrants, when you are dealing with people who are legitimate guests of the United States, the culture of the bureaucracy is toward service. When we are dealing with security, we are dealing with enforcement. I think one of the challenges is sometimes one has to sort

those two out. And if enforcement, as may have necessarily happened in the last few months, takes over the whole culture, the culture is one that is not going to be very sensitive to individual rights. And I think mistakes are going to be made because of the overwhelming power of that enforcement mentality. But obviously, that is not the right mentality if a person is a legitimate immigrant, somebody who has legitimate reasons to be a guest here.

I would also say that communication is an issue, those institutions that are my members that when the FBI, for example, was interested in foreign student records, in some universities, the FBI, the local police chief of the campus and the university president actually talked about what—how it was going to be done. In some cases, the university could provide perfectly readily available public information to the FBI without them having to seem to sort of reach in and grab it. In other places, there was no communication, and without any consultation with the college president, somebody who perhaps was innocent, somebody who was perhaps guilty, was sort of withdrawn in a rather crude way from the campus creating, of course, a bad PR situation.

So the other thing is that we are not good at communication, that when there is an enforcement issue and there is a kind of academic tradition, and you throw these two together, you have got to have very effective communication. As far as I can see, it is just not there any longer.

Ms. JACKSON LEE. I thank the Chairman very much. I would ask Ms. Jacobs if she could give me a letter in writing on the delays that are presently in place, being the delays on dealing with, particularly, individuals in science and research areas coming into this country. I need to understand that better, and I thank the Chairman for his indulgence. And I just say that immigration really does not equate to terrorism, and we must find a balance. Thank you.

Dr. BARTLETT. Thank you. And the Chair now recognizes the gentleman, Mr. Honda.

Mr. HONDA. Thank you, Mr. Chairman. And just for the record, let me just say that I agree with a couple of speakers that getting to graduate school is an issue of meritocracy in that our issues around K–12 education is falling short. And in order to be able to have—and the encouragement beyond the 12th grade to go into higher education in the sciences is an issue for me.

The question I have to Ms. Jacobs is this. We talked about backlogs of visas. And the backlogs of visas has been a pre-existing situation prior to 9/11. And so I guess my question is the process that we set up right now for review of visas, one for new applicants and others for renewals who are—for those who are here, are those different? And are those—can the renewals be expedited for those who are here asking for renewals, especially in the area of the sciences and the labs?

The other question is relative to the 9/11 where those who were involved with the flying the planes into the World Trade Center, they came in on student visas. I mean, everybody says that. My question is——

Dr. WARD. If I might just correct the record, I believe one came in on a student visa from outside of the country. Two were issued after they already arrived in the country, after they were dead.

Mr. HONDA. Okay.

Dr. WARD. And the rest came on visitor visas.

Mr. HONDA. Okay. So my question, relative to the visas, is that are visas specific to certain kinds of schools and—so that there is a distinction between applying for a student visa to go to a flight school versus a higher education academic institution? If there is a distinction, then it seems to me that our overemphasis on what—you know, how these folks got their visas to flight school could be tempered a little bit. So those are my questions, and I would like to do some follow-up, if I may.

Ms. JACOBS. Okay. On the issue of whether visas are issues for specific schools, prior to 9/11, there was no program in place to distinguish between different types of schools. After 9/11, in fact, there is now more review of people going to flight schools. But that did not exist before 9/11.

Mr. HONDA. Okay. Mr. Chair, if I may interrupt for purposes of clarification. If that is the case, there was no distinction by schools. They—on the visa, then, they have to state what schools they want to apply to so that—because I think that the school is required to report back to the—to INS as to whether the students did arrive or not, is that correct?

Ms. JACOBS. Right. Exactly. There is—well, with this new tracking system, SEVIS, that we have been talking about, there is a mechanism in place for doing that.

Mr. HONDA. Okay.

Ms. JACOBS. Let me just add really quickly that most of the people applying for student visas and for exchange visitor visas, provided there is no problem with the case, those cases are processed rapidly and the visas are often issued within a day or two. In fact, I think that is true for the vast majority of these applicants. Only about 2.5 percent, a little bit less than 2.5 percent of all of the visas that we issue are subject to these new security requirements or to the security requirements that were in place before 9/11. And so we are not talking about large numbers here. So when we talk about these delays, I just want to make that very clear that really in the big picture, in the big scheme of things, we are not talking about large numbers.

Mr. HONDA. So applicants for student visas outside of the country will get an answer within a day or two?

Ms. JACOBS. In most instances, provided there is no——

Mr. HONDA. In 98 percent of the cases.

Ms. JACOBS. I can't give you an exact percentage. I could get back to you with that, but I would say in the vast majority——

Mr. HONDA. Okay.

Ms. JACOBS [continuing]. That is true. Now you had asked about revalidating visas I—for people who are here. The vast majority of student visa applications are adjudicated at posts at the time the application is made. Only a very small percentage of student visa applications are referred by posts to Washington for additional security review. We do not have precise figures as to what percentage of various categories of visa applications are subject to security screening, but it is safe to assume that the percentage is close to the overall figure of 1.6 percent that applies to all categories of

visas. We are currently receiving responses within three weeks for over 70 percent of cases subject to interagency security screening.

Mr. HONDA. For renewals.

Ms. JACOBS. We do renew visas for certain categories of visas for people who are here in the U.S., primarily people who are here in a business-related capacity. For students and exchange visitors, we don't do that, so they are—if they need a new visa, they are required to return—go outside of the United States to get the visa.

Mr. HONDA. Even if they are here?

Ms. JACOBS. If they are here, that is correct.

Mr. HONDA. Okay. So they have to go back to their country of origin?

Ms. JACOBS. If their visa has expired, yes. Now the visa does not exactly equal the authorized state. That is sometimes another confusion in that the visa simply allows the person to travel to the United States. Once they get here, it is the former INS, the border inspection people, that determine how long that person can stay in the United States.

Mr. HONDA. And for renewals?

Ms. JACOBS. For visa renewals, again, that would be done overseas. Some of these people who come here may try to extend their status or adjust their status, and that would be done with the former immigration service here in the United States.

Mr. HONDA. So if I were working for a national lab, would I be on a visa or would I be on a green card?

Ms. JACOBS. You—it would depend on how you came in. If you entered as a non-immigrant—you would have a visa in any case. You need a visa to come into the United States. It could be a non-immigrant visa; it could be an immigrant visa.

Mr. HONDA. So if I were asking for a renewal and I have been here for a few years, I have to go back to my country of origin to renew my visa?

Ms. JACOBS. Yes.

Mr. HONDA. Do you see that as a problem?

Ms. JACOBS. I am not sure if it is a problem. It may be a problem for some people, but that is basically the way the system works now where we have two different agencies involved in taking care of people: one that helps them get here and one that takes care of them once they arrive.

Mr. HONDA. What assurances do you give applicants for renewal that, you know—are there assurances you can give, I mean, folks who are applying for renewals who are working, say, at national labs that they will be able to come back if they were in the countries that we supposedly have targeted as, you know, high risk countries?

Ms. JACOBS. We can never give any type of guarantee or assurances in advance that someone will get a visa. On the clearance side, we can try to work to make a clearance valid for a longer period of time so that that person doesn't have to go through that clearance process again. But the person would have to qualify for the visa in any case, you know, under the various grounds of the Immigration and Nationality Act.

Mr. HONDA. Do you see this as a problem as far as retaining and giving reassurance to those who are here already working with this?

Ms. JACOBS. Well, I am not sure if it is a problem. It is the way the law is written right now.

Mr. HONDA. I understand how the—that you are saying that the law is—how the law is written right now. I mean, there are some laws that are—that we can—there is no way we counsel folks or anything else like that. Let me ask a different question. In your backlog, do you have an idea of how much of a backlog you have on each category of renewals and new requests?

Ms. JACOBS. I think that most of the so-called backlogs, the delays, are with cases that happened a few months ago. For the most part now, people who are subject to clearances, provided that there is no problem with the case, we are able to get those processed within 30 days, some of them much more rapidly.

Mr. HONDA. Maybe I don't understand what is happening with INS, but it has been my experience in my own district that we have folks who had applied for visas that have been there, you know, for a couple years or maybe more, and there is a backlog there. Are you making a distinction of that kind of backlog versus other backlogs?

Ms. JACOBS. Yes, sir. The——

Mr. HONDA. Oh, okay.

Ms. JACOBS [continuing]. People who are dealing with immigration are trying to adjust status, and there may be backlogs with those requests.

Mr. HONDA. Do you—have you guys gotten into not touching paper and, according to—using technology to be able to process some of these things?

Ms. JACOBS. Absolutely. We——

Mr. HONDA. Where are you on that?

Ms. JACOBS. Well, I think that we have made a number of advances over the years. I think that the State Department has been in the forefront, actually, of using technology in visa processing. We have developed Machine Readable Visas. We now have a consolidated database that contains all of the records of the visas that we have issued and visas that have been denied. That is refreshed every five minutes. Every visa that is issued around the world, every five minutes, that information comes back into this database. We are actually sharing that database now with the former INS, so I think it is fair to say that we have made a number of advances, and we continue to look for technological solutions to a lot of the problems that we are talking about today.

Mr. HONDA. Okay. I thank the Chair for his indulgence. If I may ask one more question, do you have any benchmarks and goals set up for your—for INS in terms of cleaning up all of the backlogs in all of the categories, and if not, would you be able to set one up?

Ms. JACOBS. Okay. Well, for the State Department's part, we are—we have set certain time limits within our own, you know, organization within the State Department that handles—that coordinates these visa clearances that if we don't have a response within a certain number of days, we go back to the other agencies to see what the status is. As far as Department of Homeland Security and

any backlogs that they might have with adjustment of status and other cases, I am—I would imagine they are taking steps to address that. I am—I just can't really answer for them.

Mr. HONDA. I thank you very much.

Dr. BARTLETT. Thank you. I want to thank the witnesses very much for your testimony. Just so the record can be clear, again, roughly what percent of the students in our universities in science, math, and engineering are foreign students?

Dr. WARD. I think maybe approximately half.

Dr. BARTLETT. Okay. And what percent of those foreign students elect to stay in this country and work in this country after their education is completed?

Dr. WARD. About 30 percent.

Dr. BARTLETT. About 30 percent choose to stay here? I would just like to note a problem that our national labs have, and that is that it is very difficult to get clearance for foreign students. And there are really not enough graduates, citizens in this country, to fill the vital needs in our national labs, which is another fact that adds urgency to the challenge of capturing the imagination of our citizens and the—encouraging more of our young people to go into these careers.

I want to thank you very much for your testimony. The Committee is now adjourned.

[Whereupon, at 12:50 p.m., the Committee was adjourned.]

Appendix 1:

ANSWERS TO POST-HEARING QUESTIONS

ANSWERS TO POST-HEARING QUESTIONS

Responses by Janice L. Jacobs, Deputy Assistant Secretary, Visa Services

Questions submitted by Chairman Sherwood Boehlert

Q1. When do you expect the visa backlog to be cleared up and what will be the average wait for a visa when things return to normal? What needs to change to get the situation rectified?

A1. The vast majority of delays that affect visa cases are the result of cases that are referred to Washington by consular officers for a security advisory opinion. The Department's role in the interagency clearance process to provide a security advisory opinion is essentially one of being a clearing-house. We coordinate the clearances as the visa applications are reviewed by other federal agencies. In most instances, we receive replies from other agencies within 30 days. If an agency files an objection, there may be an additional delay as that agency locates and makes available the appropriate background information. We do not foresee any shortening of that average turnaround of 30 days in the near future given the resource base of our federal principal partners in this endeavor.

Q2. Dr. Ward and Dr. Tilghman offered a number of recommendations on how to improve the visa processing system. Please comment on the merits and the feasibility of the following proposals:

Q2a.

- *Require State Department Consular Offices to collect the SEVIS fee as part of the visa collection fee.*

A2a. During the formation of SEVIS, the State Department met at the Assistant Secretary level with former INS Commissioner Ziglar to explore this possibility, but we mutually decided not to implement such a collection scheme for a number of reasons.

First, such an approach likely would lead foreign governments to regard any SEVIS fee as a visa fee and to impose reciprocal visa fees on American students applying for visas to study overseas. In addition, the $100 Machine Readable Visa (MRV) fee that is collected from all non-immigrant visa applicants is, in almost all cases, collected by local financial institutions on behalf of our embassies and consulates. These arrangements were put in place because the personnel and resource constraints under which our missions. in the field operate while issuing millions of non-immigrant visas annually compel us to "outsource" as many visa support functions as possible, including the collection of fees.

Our MRV collection arrangements have been carefully negotiated in consultation with the U.S. Treasury. They involve the foreign financial institutions receiving payments for their services from the fees collected and remitting the balance of the fees to the U.S. Treasury for credit to a Department of State appropriation, rather than miscellaneous receipts, consistent with the Department's statutory authority to retain the MRV fee to recover the costs of providing consular services. It simply is not feasible for us to revisit these arrangements; doing so would be a complex and difficult effort because any SEVIS fee would have to be handled very differently than the MRV fee.

Q2b.

- *Require the State Department to use the SEVIS system—not their own system—to ensure real time access to data.*

A2b. We have available in our Consolidated Consular Database (CCD) over 400,000 SEVIS records that have been "pushed" from the DHS SEVIS database over the existing data share link between the two agencies. We developed this process so that the SEVIS data will be available to consular sections to support and integrate with the visa adjudication system and not duplicate available automation.

Consular officers can access records in CCD for the purpose of electronic.verification, and CCD will record SEVIS information as part of the electronic visa record. Having SEVIS information reported to the existing State-DHS data share, system is critical as well to meeting the statutory requirement to report the issuance of all "F" (academic students), "M" (vocational students), and "J" (exchange program visitors) visas to DHS.

We plan to make SEVIS directly available to consular sections in the near future. However, we do not view this direct access as a substitute for the requirement that SEVIS data be integrated into our visa adjudication data stream for adjudication, record keeping and reporting purposes. Rather direct access to SEVIS will serve as

an information resource that will grow more valuable over time as SEVIS entries mature into long-term. student and exchange visitor case files.

Q2c.

- *Create a visa revalidation process for foreign students and—scholars already in the U.S., thereby ensuring their ability—to return to the U.S. in a timely manner after a short visit abroad.*

A2c. Our regulations do not permit revalidation of student visas in the U.S. These visas must be applied for at our overseas posts. The State Department has no capacity within the United States to conduct visa interviews for alien students and scholars in the United States who wish to leave the U.S. and who require issuance of a new visa to return. We will, however, explore the possibility with interested Washington agencies of having visa clearances be valid for longer periods of time to allow students and scholars to travel in and out of the country during that time period.

Q2d.

- *As colleges and universities are in a unique position to understand both the needs of students and scholars and the vulnerabilities of the current system, encourage the State Department to work with colleges and universities to develop a more effective and efficient visa screening process.*

A2d. The Department's Bureau of Consular Affairs and Educational and Cultural Affairs both enjoy positive, fruitful working relationships with the educational community as well as with exchange visitor program sponsors. We are engaged in a very active exchange on the many issues that affect the issuance of visas to students and scholars. However, we continue to view federal intelligence and law enforcement agencies as the primary experts on the effectiveness of meeting national security objectives through the visa screening process. They have access to classified information from sensitive sources and methods that the academic community cannot duplicate even with the best of intentions.

Q3. Many and perhaps most of the scholars caught in our visa limbo are from China, Russia and India, which, not coincidentally, are the source of most of our foreign students. These countries present some risks but they're not at the epicenter of terrorism. Can we do something to help ease the path of these students and especially of well-known scholars from these countries?

A3. The focus of the interagency review process is broader than counter-terrorism. Risk assessment takes into account other issues such as hostile intelligence activity and unauthorized access to sensitive technology, and affects all nationalities. When submitting a case for Washington interagency review, a consular officer identifies a specific reason or concern. Cases are not submitted simply because a visa applicant from one of the countries noted above intends to pursue a scientific program.

As the risk assessment of U.S. federal agencies changes, we so advise consular officers. Our goal is that the identification by consular officers of visa applications for interagency review is done on a targeted basis and is keyed to genuine intelligence and law enforcement concerns.

Q4. All of our questions come down to fundamental issues of attitude. Does the State Department view students and scholars primarily as potential terrorists who may have to be let in for other reasons or as important resources that need to be filtered to ensure that terrorists don't slip in?

A4. As stated in the testimony, while seeking to ensure the security of our nation, we do recognize the valuable contributions that students and scholars provide this country. When adjudicating visas, consular officers are governed by the language of the relevant statutory grounds of ineligibility in the Immigration and Nationality Act, against which consular officers consider every visa application. Grounds of ineligibility are far broader than terrorism and other national security issues. All determinations made by consular officers are done strictly within the terms of relevant laws and regulations, and riot based on any preconceived notions with respect to nationality or proposed activity in the United States. When adjudicating visas, consular officers also follow security-related clearance procedures established by interested Washington agencies. We continue to work through the interagency process to make these clearance procedures as rational, transparent, and predictable as possible.

Q5. Shouldn't the U.S. have a better system of collecting statistics on visa processing so that we could have a clear picture of when backlogs are starting to develop? Is the State Department or any other agency taking any action in that direction?

BEST COPY AVAILABLE

A5. We are improving our ability to collect and analyze statistics. We are developing the capability to track the case load of pending security advisory opinion (SAO) requests at any given post, through the Consular Consolidated Database (CCD). We are also developing CCD reports to track visa workload at posts where processing has slowed due to factors such as a sharp increase in applications or limited workspace.

The Visa Office, using these reports, will be able to review cases pending more than a certain number of days, to determine whether the interagency clearance process is falling behind. Most clearance delays on cases that were submitted to Washington by consular officers for interagency screening, however, are the result of holds placed on specific cases by other government agencies, over which the Visa Office has no control. The Visa office will use the reports to monitor the process and bring to the attention of other agencies evidence of backlogs within their holdings.

The Visa Office will work closely with CA's Executive office to ensure that appropriate resources are brought to bear to speed processing for cases delayed by an increase in visa workload at a particular post or other unanticipated factors due to changing political and economic conditions.

Questions submitted by Representative Ralph M. Hall

Q1. Would it make sense for consular officers to have available, at the time they consider the visa requests of foreign graduate students, information from the university that has accepted them for attendance regarding the educational programs they will be entering? The university would be able to provide a better judgment about the relationship of the research area student will be involved in to the Technology Alert List than would the consular officer, who is not technically trained and has only a brief interview with the student. Is there a mechanism that would allow universities to provide consular officers with information about prospective students and their areas of study.

A1. It is already standard practice for student visa applicants to present evidence of their planned course of study, in support of their applications. The objective of the interagency review process that affects some student cases is to have the benefit of the unique expertise of federal intelligence and law enforcement agencies. Much of the information available to such agencies is highly classified and would not be known to administrators or educators at U.S. academic institutions.

Q2. You indicate in your testimony that you are meeting with the Department of Homeland Security and OSTP to work out the details for establishing the Interagency Panel on Advanced Science and Security—IPASS—which is intended to increase the involvement of federal scientific experts to work with intelligence and law enforcement representatives to advise the State Department on science related visa applications. What is the schedule for IPASS implementation? What effect will IPASS have on the lead time for security screening for visa applications?

A2. A schedule for IPASS implementation has not yet been established. All participants in interagency discussions of IPASS have emphasized that any procedures established should not increase the lead time required for security screening of visa applications.

Q3. The GAO in its October 2002 report, "Border Security," (GAO–03–132NI) found that most of the consular officers they interviewed believed that more comprehensive guidance and training would help them to use the visa process as an anti-terrorism tool to detect questionable applicants. The GAO report recommended that the State Department develop more comprehensive, risk-based guidelines and standards on how consular officers should use the visa process as a screen against potential terrorists, and also recommended revamping and expanding consular training. What is the State Department's response to these recommendations?

A3. The Department has taken the cited GAO report very seriously and is moving quickly to improve and expand guidance to our officers in the field, as well as training. The Bureau of Consular Affairs issued a visa processing "roadmap" (State 039275, 11 February 2003) to provide comprehensive guidance to our posts on balancing national security concerns with the desire to facilitate legitimate travel, provide timely customer service, and manage visa workload. We have followed up with Standard Operating Procedure cables (nine sent to date) to ensure that our posts are working consistently and understand what is expected of them. Consular super-

visors have been reminded of their responsibility to provide guidance to line officers on issuance and refusal criteria.

Consular training has expanded the Basic Consular Course with new sessions on counter terrorism, as well as expanded training on visa fraud and malfeasance, on ethics, and on interviewing skills. One hundred and twenty eight experienced consular officers have received specialized, highly technical training in advanced consular name-checking techniques in order to make the best possible use of our enormous CLASS database. Plans are also underway to provide training to Ambassadors, DCMs, and Principal Officers to better supervise consular officers and to enhance the skills of consular managers. In addition, the basic consular course will be expanded in October 2003 from 26 to 31 days, in part to make room for a new two-day module on analytic interviewing techniques.

Questions submitted by Representative Mark Udall

Q1. You indicate, in your testimony that the State Department is engaged in significant outreach to federal partners to work out problems in the visa review process to improve the predictability for the scientific and academic communities about visa processing. Please provide some details about the kinds of actions you are contemplating that will, in your words, "rationalize the clearance process in light of today's national security threats and reestablish rational, transparent clearance procedures that focus on those applicants who present the highest risk."

A1. The Department has had regular and frequent contact with the Homeland Security Council, the White House Office of Science and Technology Policy, DHS, intelligence agencies, and law enforcement agencies.

With regard to counter-terrorism interagency reviews, State is engaged in an active dialogue with appropriate federal partners to revise the threat assessment now available to consular officers. The criteria are classified and will remain so. We cannot therefore provide specific examples of how it is being rationalized.

With regard to issues related to sensitive technology, the Department participates regularly and frequently in interagency meetings convened by the White House Office of Science and Technology Policy. The proposed Interagency Panel on Advanced Science Studies (IPASS) grew out of these meetings. When fully implemented, IPASS will review visa applications of individuals seeking to pursue uniquely available advanced scientific studies in the United States and advise the Department whether the proposed course of study will evade or violate any laws prohibiting the export from the United States—of goods, technology, or sensitive information. The WH–OSTP and the Consular Affairs bureau of the Department continue to convene meetings to work out details of the IPASS process. Members of the scientific and academic communities participate actively in these meetings, to the extent allowed by their level, if any, of security clearance. The public will see some of the changes attributed to interagency consultations as the technology alert list, an unclassified document, is revised and disseminated.

Q2. The automated, web-based Student Exchange and Visitor Information System (sic) (SEVIS) is now in place, and information on students and exchange visitors must have been entered in the system when they applied for a visa. Is it true that consular officers do not have online access to SEVIS? If not, will this be done in the near term, and what are the implications for delays in visa approvals until online access is available?

A2. At this time, consular officers do not have direct access to SEVIS. Rather, SEVIS data is made available to consular officers through integration with our Consolidated Consular DataBase (CCD) so that the data becomes a component of our visa information for adjudication, record keeping, and reporting purposes. At this time, over 400,000 SEVIS records appear in the CCD. The flow of SEVIS records into the CCD continues to experience technical glitches due to lack of conformity with the interface control agreement between DHS and State. These data glitches affect disproportionately, though not solely, dependent records. State and DHS data technicians cooperate in an ongoing effort to identify potentially troubled SEVIS files and correct them before an individual visa applicant is disadvantaged. In other cases, DHS has located, corrected if necessary, and forwarded SEVIS files to State only after an individual visa application has alerted us to the existence of a particular record.

We plan to make SEVIS directly available to consular sections in the near future. However, we do not view this direct access as a substitute for the requirement that SEVIS data be integrated with our CCD system. Rather, direct access to SEVIS will

serve as an information resource that will grow more valuable over time as SEVIS entries mature into long-term student and exchange visitor case files.

ANSWERS TO POST-HEARING QUESTIONS

Responses by David Ward, President, American Council on Education

Questions submitted by Chairman Sherwood Boehlert

Q1. What are the greatest obstacles to the full implementation of a real-time student tracking system?

A1. The greatest obstacle to the full implementation of the SEVIS system remains the technological glitches within the system. Without properly vetting and dealing with these technological flaws, the influx of records that will be created between now and August 1st will most likely stress the system and cause further delays. Additionally, the batch processing feature, which schools need to submit large amounts of data, works intermittently at best. This significantly limits the ability of schools to input records a timely fashion.

It is also of concern that contrary to promises, SEVIS does not provide real-time access to data. SEVIS was designed to link schools, the State Department and the INS in real time. However, some embassies and consulates find that it takes a week or longer for them to access data entered into SEVIS. Without timely consular access to the SEVIS data, a student may not apply for a visa. These delays cause confusion and frustration for embassies, students and schools.

Finally, the INS has not provided adequate training to campus officials or even to its own staff. Regional INS officials have not been adequately trained and therefore often provide different answers to the same questions. The SEVIS Help desk can answer only technical questions about the system but is unable to answer regulatory questions.

Q1a. What are the most useful steps that the government can take to improve SEVIS?

A1a. We feel that the Federal Government and Congress could implement several measures right know which would greatly improve efforts to implement a real-time SEVIS system:

- ICE (formerly the INS) should provide adequate training to the field office and port of entry staff to ensure that they are providing consistent information to visa holders and institutions. Additionally, the SEVIS help desk should be able to provide regulatory guidance to institutions.
- SEVIS should be thoroughly tested for technological flaws as quickly as possible before institutions begin entering foreign student record for the Fall of 2003.
- The State Department consulate offices should collect the SEVIS fee as a part of the visa collection fee. This maintains SEVIS as an electronic system and streamlines the process for the consular offices and for the foreign student.
- Campuses—specifically Designated School Officials (DSOs)—should be given broader access to SEVIS in order to correct clerical errors in the initial form.
- The State Department should use the SEVIS system to ensure real time access of data. Currently, the State Department runs the SEVIS data through their own system instead of using the secured Internet-based interface. In some instances, this has caused data loss.

Q2. What are the greatest obstacles to a predictable visa adjudication?

A2. In the last 18 months, visa delays for students and scholars have become more extensive and unpredictable for several reasons. First, the State Department has increased the number of subjects on the Technology Alert List significantly. It now encompasses virtually every area of contemporary science and engineering. Blanket areas like "civil engineering" have now been added to the list. Second, last summer the State Department imposed stricter review procedures for visa applications flagged for review in the Visa Mantis process. Under the stricter procedures, a visa application that a consular officer refers to Visa Mantis must be reviewed by appropriate government agencies and must receive a security advisory opinion before a visa decision can be made. There is no time limit on how long a review can take. This causes uncertainty for those students and scholars applying for their visas who are trying to plan their travel arrangements around a program start date.

Q2a. What are the most useful steps the government could take to improve the visa processing system?

A2a. In our opinion, a process by which existing student and scholar visa holders can revalidate their visas before leaving the U.S. for academic, health, or other personal reasons would significantly reduce the impact of visa processing delays because students and scholars would be able to continue their studies, teaching, and research uninterrupted while their visas are being processed.

Questions submitted by Representative Ralph M. Hall

Q1. There have been reports of problems with the implementation of the automated, web-based computer system for tracking international students and exchange visitors, the Student Exchange and Visitor Information System (SEVIS). How would you characterize the efforts being made to sort out the problems and deficiencies of the system?

Q1a. What actions that should be taken that are not being taken?

Q1b. To what extent is there collaboration and communication between the users of SEVIS and the office within the Department of Homeland Security responsible for implementing SEVIS?

A1a,b. ICE and the SEVIS staff have begun a weekly conference call with members of the higher education community to address outstanding issues with SEVIS. Additionally, there is a regular conference call addressing technical issues for the software vendors. Other than the four regional workshops that were sponsored by ACE, we are not aware of efforts by the Department of Homeland Security to educate or begin a dialogue with the campus DSOs. The SEVIS help desk sends upgrade and technical correction e-mails to users. This is primarily a reactionary communication in response to problems with the system.

ANSWERS TO POST-HEARING QUESTIONS

Responses by Shirley M. Tilghman, President, Princeton University

Questions submitted by Chairman Sherwood Boehlert

Q1. What are the greatest obstacles to the full implementation of a real-time student tracking system? What are the most useful steps the government could take to improve SEVIS?

A1. There are numerous technical limitations and glitches associated with the SEVIS student tracking system, namely the difficulties associated with batch data transfer, the periodic slowness of the system, and security breeches related to retrieval of data. But the greatest obstacles to full implementation of the SEVIS system include the inexperience of the new Department of Homeland Security (DHS); the relative lack of communication between DHS, the State Department and institutions of higher education; and the lack of adequate numbers of SEVIS support staff who are trained in both the technical details of SEVIS as well as immigration policy and practice.

The most useful steps the government could take to improve SEVIS would be to:

1. Identify the individual at DHS who will be responsible for managing the SEVIS system and require that individual to meet with higher education representatives to discuss the current limitations of the SEVIS system and to develop a strategy and timeline to upgrade and fix the system;
2. Fully staff the SEVIS help centers with individuals trained not only to answer technical questions related to SEVIS but also to answer questions about immigration policy and practice;
3. Ensure that data entered into the SEVIS system is uploaded in real-time so that the system provides accurate data to all who access the system including consular officials;
4. Improve the batch processing capabilities of SEVIS and provide institutions with the software required to facilitate batch transfer of data, thereby eliminating the need to purchase and upgrade costly proprietary software;
5. Provide additional support staff and extend help desk hours during peak college and university enrollment periods;
6. Eliminate all paper and ensure that SEVIS is a completely paper-free system;
7. Develop and implement an appropriate fee collection procedure and ensure that the fee collection system is paperless;
8. Make sure that contractors hired to certify institutions and provide technical support are properly trained and closely monitored by DHS.

Q2. What are the greatest obstacles to a predictable visa adjudication process? What are the most useful steps the government could take to improve the visa processing system?

A2. The greatest obstacles to a predictable visa adjudication process are the lack of public information regarding the security review process, the lack of detail within the Technology Alert List regarding potential technology transfer threats, and the lack of predictability related to the length of time required for visa adjudication. Most troublesome to institutions of higher education is the lack of predictability regarding re-entry visa adjudication for those students and scholars who are already in the U.S., but who wish to attend a professional meeting or family event abroad and then return to the U.S. We are also concerned about the conflict between immigration policies that require students to leave the U.S. after they complete their education and the country's interest in retaining highly skilled international students in the U.S. workforce following the completion of their academic training.

The most useful steps the government could take to improve the visa processing system include:

1. Encourage on-going dialogue between DHS officials and higher education representatives to discuss concerns regarding current and proposed immigrant and non-immigrant student and exchange visa programs, policies and procedures;
2. Establish a deadline for the Department of Homeland Security to sign the Memorandum of Understanding with the Department of State regarding immigration services procedures and policies;

3. Establish a deadline by which the Department of Homeland Security must develop and publish its policies and procedures regarding immigrant and non-immigrant visa services;
4. Extend the period of time for which a non-immigrant visa applicant's security clearance is valid and implement a pre-certification program so that non-immigrant students and scholars already in the U.S. on a valid non-immigrant visa can travel abroad and re-enter the U.S. without undergoing additional security reviews or related delays;
5. Engage the scientific community in refining the Technology Alert List so that the list includes specific techniques or areas of potentially harmful technology transfer rather than entire fields of study or fundamental research techniques;
6. Seek help from academic institutions, professional societies and scientific communities in developing and implementing appropriate training materials to instruct consular officials on how to use the Technology Alert List in adjudicating visa applications;
7. Allow any student with a valid non-immigrant student visa to participate in any undergraduate course on campus and eliminate the need for institutions of higher education to police course enrollments;
8. Provide information via the SEVIS tracking system as to the current status of an individual's visa application so that the institution can track the process of the application for any given student or scholar;
9. Work to reduce the visa backlog and develop procedures and time limitations to ensure that visa applications will be processed and within a predictable period of time.

Questions submitted by Representative Ralph M. Hall

Q1. There have been reports of problems with the implementation of the automated, web-based computer system for tracking foreign students and exchange visitors, the Student Exchange and Visitor Information System (SEVIS). How would you characterize the efforts being made to sort out the problems and deficiencies of the system? What actions should be taken that are not being taken?

A1. There have been considerable efforts to correct the problems and deficiencies of the SEVIS system and multiple system patches have been developed and delivered to upgrade SEVIS; however, each time a patch is developed to correct the SEVIS system, institutions using batch data delivery software must wait for the commercial software provider to develop a corresponding patch which must then be installed. We are certain that eventually, and perhaps sooner rather than later, we will be required to purchase costly software upgrades or new software to continue delivering batch data to the SEVIS system. The Federal Government's inability to beta-test the SEVIS system prior to its implementation has meant that institutions of higher education have had to invest significant financial and personnel resources in a system that was launched prematurely and therefore has numerous technical problems in addition to being laborious and unpredictable. Even with the current patches in place, the SEVIS system remains deficient in accepting data via batch transfer, the speed with which the SEVIS system accepts and processes data is extremely unpredictable, and the process for correcting data entry errors is quite cumbersome.

According to representatives of the State Department, there has been a great deal of communication between the Office of Consular Affairs and the Department of Homeland Security in an effort to correct the technical limitations of the SEVIS system. Notably, there has been progress made in correcting the technical problems that prevented some records from the SEVIS system from being uploaded to the Consolidated Consular Database utilized in the consular offices.

There have been several incidents reported by SEVIS users who erroneously received data from another institution, or whose data was erroneously sent to another institution, when attempting to access student records. While these security breeches have been reported by various institutions via the news media, there has not been official notification on the part of the Department of Homeland Security when such an error or security breech has occurred. Similarly, there has been no explanation offered by DHS as to how these data errors occurred or how the system will be corrected to prevent additional security breeches. Erroneous distribution of confidential student records is of great concern to institutions of higher education and we are interested in knowing more about how DHS will correct this problem and notify the appropriate institutions in the event of a future security breech.

We are also experiencing a great deal of difficulty obtaining assistance when we have questions regarding SEVIS or immigration policy. While SEVIS does operate a help-line, it is understaffed and the wait time for help can be lengthy. When one does finally reach a help-line representative, those individuals are trained only in the technical details of the SEVIS system and not in the policy and regulatory guidelines of the non-immigrant student and exchange visitor visa program. So while most of our questions have both policy and technical elements, the SEVIS help-line can only address technical questions. We have not been successful in identifying individuals at DHS who can answer our policy questions and the State Department has removed information on VISAS Mantis and VISAS Condor from its web site pending DHS review of the programs. We hope that as DHS moves forward it will provide much greater access to information and support services than is currently available to institutions of higher education.

We are extremely concerned that the SEVIS system will fail as colleges and universities attempt to enter over a million new students and scholars into the SEVIS system prior to the 2003–2004 academic year. We hope that DHS is working now to test the limits of the SEVIS system and develop a back-up plan in the event that the system fails during peak academic enrollment seasons.

Q2. To what extent is there collaboration and communication between the users of SEVIS and the office within the Department of Homeland Security responsible for implementing SEVIS?

A2. While there had been no communication between the Department of Homeland Security and SEVIS users prior to the March hearing, we are quite encouraged by the very positive communication the higher education community has had with both the State Department and the Department of Homeland Security subsequent to the hearing. Since the hearing, representatives of the higher education community, including a small group of university presidents, have had the opportunity to meet with DHS Secretary Ridge, DHS Undersecretaries McQueary and Hutchinson, and Deputy Assistant Secretary of State Janice Jacobs. We are certain that each of these key government officials has a very clear understanding of our concerns and that each of the relevant departments is working toward solutions that will promote our mission of advancing research and education while also preserving our collective interests in national security. We look forward to continuing the dialogue with these individuals and feel that all signs point toward a very productive working relationship henceforth.

Appendix 2:

Additional Material for the Record

Posted on Mon, Mar. 03, 2003 The Mercury News

Security concerns may be shackling science

By Glennda Chui
Mercury News

Russian scientists are invited to the United States for meetings aimed at stopping the spread of nuclear weapons, only to find they can't get past the border. Foreign researchers are yanked from some federal labs. Important studies are delayed or canceled because the government insists on the right to censor the results.

As the United States confronts a new era of terrorism and war, scientists say the government's drive to tighten security is taking a toll on research and threatening to erode a culture that has made the nation a powerhouse of innovation and discovery.

Dozens of new rules -- on the books and under development -- govern who can come into the United States to work on scientific projects, who can work with dangerous organisms or sensitive technologies, how that work will be carried out and how widely the results can be reported.

"It's important to be responsible here and to be particularly careful after 9/11 that we're not giving our enemies information or materials that would make their job easier," said John H. Marburger III, science adviser to President Bush.

Many of these measures are aimed at scientists; a few, such as tighter visa restrictions, affect society at large. Some were formally adopted by Congress; others represent a ratcheting-up of security by federal agencies.

Scientists acknowledge that work on some microbes or sensitive technologies could be dangerous in the wrong hands. Alarms have been raised over the publication of studies that tell how to make a relative of smallpox more virulent and how to build a poliovirus from scratch, among other things.

But many fear the security crackdown will backfire, hampering studies that are critical to thwarting terrorists. The fastest way to move that work along, they say, is to allow scientists to talk freely to each other and bring in the world's brightest minds to help.

"This is so much overreaction," said Douglas Osheroff, a Nobel Prize-winning physicist at Stanford University. "We cannot wall ourselves off from the rest of the world."

While there is no question that the nation faces a heightened level of danger, he said, it is not clear that the steps the government is taking will significantly increase security in the nation's laboratories.

Study disrupted

BEST COPY AVAILABLE

Foreign researchers who have worked here for years are afraid to leave the country for fear they'll be unable to get back in; some have been stranded overseas for months.

The bottleneck has disrupted studies and forced the cancellation of high-level meetings. In one case, Russian physicists enrolled in a training program on safeguarding nuclear weapons were unable to get visas in time for the start of class. It's ironic, said Clay Moltz, director of the program at the Monterey Institute for International Studies, because ``this is one of the absolute targets that the government wants to reach and promote more responsible behavior.''

The U.S. Department of Agriculture, saying it cannot conduct adequate security checks, has ordered all foreign scientists to leave its labs when their temporary visas expire.

Among those affected by the new rules is an Iranian earthquake engineer who was invited to come to the University of California-Berkeley to share his expertise on using steel to reinforce buildings.

Alarmed by the immigration clampdown, he decided to spend a sabbatical year in Canada instead. Like many other scientists contacted for this story, he did not want his name used.

``As a researcher and scientist, I devote my life on research benefiting humans,'' said the engineer. ``Like other researchers, I would prefer to stay away from troublesome activities such as traveling to the U.S.''

There are more changes ahead. Among the most worrisome for scientists is a proposal to create a new class of ``sensitive homeland security information,'' neither public nor classified, that would be subject to government review and censorship under guidelines still being developed by the Office of Management and Budget.

Marburger said the new designation would not be used to censor basic research results. It would apply, he said, to certain types of information already held by the government, such as law enforcement data and threats to critical computer systems.

Despite these assurances, many researchers worry that government censorship will creep into their laboratories. At the same time they're taking steps to censor themselves.

Two weeks ago, the editors of some of the most prestigious journals in science and medicine issued a statement saying that some research is too dangerous to be published -- although there is no easy way to define, in advance, exactly what it would be.

Manuscripts flagged

Ronald Atlas, president of the American Society for Microbiology, said only two of 14,000 manuscripts submitted to the society's 11 journals had been flagged for further review. One, he said, described in ``cookbook detail'' how to make a microbe a more effective biological weapon. The details were removed and the paper will be published.

``We are not going to be censors,'' he said, ``but we are going to be responsible.''

BEST COPY AVAILABLE

On another front, the presidents of the national academies of science and engineering and the Institute of Medicine said late last year that the visa situation is ``urgent.''

They called on the government to expedite approval of visas for scientists and students, saying that Americans ``cannot hope to maintain their present position of international leadership if they become isolated.''

Universities have also been weighing in. In January the Stanford faculty senate passed a resolution saying that some of the actions taken or contemplated by the federal government could hurt education and research.

``We were troubled by what seemed to be restrictions on biological research that would cause substantial trouble without noticeably improving security,'' said Henry Greely, a law professor who chairs the faculty senate. The same is true of the visa restrictions, he added: ``At the very least, some fine-tuning'' is needed.

In truth, many scientists are uneasy. They realize their work can be capable of delivering great good or great harm. When it comes to balancing security and the open debate that is at the heart of good science, they are not always sure where they should stand.

``What is the responsibility of scientists and researchers whose work carries a potential for abuse? It's a hard question, and it doesn't lend itself to knee-jerk responses,'' said Steven Aftergood, director of the project on government secrecy at the Federation of American Scientists.

``You can't just say the government is wrong,'' he said. ``You have to consider the possibility that there are people out there who are willing to engage in wholesale violence.''

Some of the hijackers involved in the Sept. 11 attacks had trained at American flight schools; one of the 19 had come on a student visa, but never attended classes. Later, investigators found the system used to track the nation's half-million foreign students was full of holes.

Visas delayed

And some foreign students have learned deadly skills in American universities; a few went on to become key figures in the Iraqi nuclear and biological weapons programs.

The U.S. State Department, while acknowledging that visa applications for scientists from certain countries have been delayed for three months or more, said it is looking at ways to improve the process.

``We need to see to it that people who are applying for visas in certain scientific categories are really qualified to do the work they are applying for, and they are not using that as a device to enter the United States for other purposes,'' said department spokesman Stuart Patt.

While researchers generally agree with the need for more security, they're afraid the resulting layers of bureaucracy -- and the cost of complying -- will impede their work. The new rules on

BEST COPY AVAILABLE

biological agents, for instance, govern work on potentially dangerous germs and toxins done by 20,000 scientists at 1,000 labs. They will have to beef up security at a cost of up to $700,000 per laboratory.

Some of those agents ``are things that are pretty widely used in biological research,'' said Stanford's Greely. ``The prospect that minor mistakes in what label you put on them, what refrigerator you put them in, could be federal felonies, is disconcerting.''

Some of the new security rules run counter to policies at universities.

``One of the core cultural beliefs of the university -- not just the University of California, but all universities -- is that we do research which is then put into the public domain,'' said Larry Coleman, vice provost for research for the UC system. ``Universities see themselves as keepers of the flames of knowledge.''

BEST COPY AVAILABLE

Posted on Mon, Mar. 10, 2003

The Mercury News

Visa restrictions hamper research

NATION GETS MORE BUREAUCRACY, NOT MORE SECURITY, AS AGENCIES KEEP FOREIGN SCIENTISTS OUT, WHICH ENDANGERS TECHNOLOGY LEADERSHIP

EFFORTS by the U.S. government to tighten controls on foreign visitors are creating a growing mess that threatens the nation's -- and Silicon Valley's -- leadership in business, science and technology.

As reported by the Mercury News' Glennda Chui, post Sept. 11 security concerns have led to tighter visa restrictions that are keeping some foreign scientists from coming into the United States for legitimate purposes.

Visa delays of months, and seemingly arbitrary visa denials, have also affected engineers, computer scientists and business executives, threatening the operations of any company of global reach.

The stories are troubling: a Chinese AIDS researcher living in the United States was unable to return to his job at a Fremont biotech company after a trip overseas; Russian physicists weren't granted visas in time to join a training program in Monterey on safeguarding nuclear weapons; an Iranian expert on new techniques to secure buildings against earthquakes was scared off by the visa gauntlet and opted to go to Canada, instead of UC-Berkeley.

Things are in such disarray that the National Institutes of Health is informally warning its foreign scientists and doctors, roughly half of the institution's total, that they might not be allowed back into the United States after visiting their home countries. The presidents of the National Academies say visa restrictions have caused cancellations and disruptions of important international scientific meetings, which are at risk of being moved overseas.

The answer is not to eliminate security checks, but to do them efficiently.

A 2002 report by the General Accounting Office painted a troubling picture of visa operations, which are run by the State Department. Consular offices in charge of issuing visas around the world were still adapting to a shift from screening primarily against potential illegal immigrants to screening against potential terrorists. The criteria used were vague and applied differently from office to office. Necessary sharing of information between consular offices, intelligence agencies and the Immigration and Naturalization Service, now absorbed by the Department of Homeland Security, was slow and spotty.

As a result, increased screening is giving us more bureaucracy, not more security.

Unless these agencies quickly address these problems, businesses, universities, research labs, scientific institutions and the United States as a whole will pay a heavy price.

BEST COPY AVAILABLE

IN AMERICA'S INTEREST: WELCOMING INTERNATIONAL STUDENTS

REPORT OF THE STRATEGIC TASK FORCE ON INTERNATIONAL STUDENT ACCESS

EXECUTIVE SUMMARY

At a time when efforts to counter the global threat of terrorism have highlighted the importance of building ties and friendships around the world, the United States needs a comprehensive strategy to enhance the ability of legitimate international students to pursue educational opportunities here. Such is the conclusion of a task force established by NAFSA: Association of International Educators to examine the issue of international student access to higher education in the United States.

In its report, "In America's Interest: Welcoming International Students," the Strategic Task Force on International Student Access identifies the major barriers to the ability of prospective international students to access U.S. higher education, and sets forth a strategic plan to address each of them.

The Continuing Importance of International Students

The task force report affirms that openness to international students serves long-standing and important U.S. foreign policy, educational, and economic interests. The terrorist attacks of September 11, 2001, presented new challenges for screening visa applicants more carefully to keep out those who wish us harm. At the same time, the terrorist threat also highlights the importance of building friends and allies across the world to better counter such global threats. The task force report therefore restates the case for encouraging and enabling legitimate international students to study in the United States. The task force believes strongly that international education is part of the solution to terrorism, not part of the problem.

Barriers to International Student Access

The U.S. position as the leading destination for international students has been eroding for years in the absence of a comprehensive national strategy for promoting international student access to U.S. higher education. In this strategic vacuum, four barriers, which impede access, remain unaddressed. The principal barriers are (1) the failure of the relevant U.S. government agencies to make international student recruitment a priority and to coordinate their recruitment efforts, and (2) burdensome U.S. government visa and student-tracking regulations. Lesser barriers are (3) the cost of U.S. higher education, and (4) the complexity of the U.S. higher education system.

A Strategic Approach to Promoting International Student Access

The task force recommends that the U.S. government, in consultation with the higher education community and other concerned constituencies, develop a strategic plan for promoting U.S. higher education to international students, based on a national policy that articulates why international student access is important to the national interest. In the context of such a strategic plan, the task force makes the following recommendations for addressing each of the four barriers to international student access cited above.

A Comprehensive Recruitment Strategy

A recruitment strategy must be developed that specifies the roles of the three federal agencies that share responsibility for international student recruitment—the Departments of State, Commerce, and Education—and provides for coordination of their efforts. Such a strategy must rationalize and create an effective mandate for the State Department's overseas educational advising centers, resolve issues of responsibility and coordination in the Commerce Department, and provide a clear mandate for the Department of Education.

Removing Excessive Governmentally Imposed Barriers

Three broad actions are required to remove governmentally imposed barriers that unnecessarily impede international student access to U.S. higher education. First, immigration laws affecting international students must be updated to reflect twenty-first century realities, particularly by replacing the unworkable "intending immigrant" test set forth in section 214(b) of the Immigration and Nationality Act with a standard that focuses on whether or not the applicant is a legitimate student. Second, a visa-screening system is needed which permits necessary scrutiny of visa applicants leading to decisions within reasonable and predictable periods of time. Third, the Administration must strive to implement the Congressionally-mandated

student monitoring system in a way that maintains the attractiveness of the United States as a destination for international students without sacrificing national security.

Addressing Issues of Cost

Issues of cost must be addressed through innovative and expanded loan, tuition exchange, and scholarship programs for international students. Scholarship assistance, through the Agency for International Development, should be directed at countries or regions—such as Africa—where the United States has a strong foreign policy interest in providing higher education opportunities but where the cost of a U.S. higher education is an insurmountable barrier. A financial aid information clearinghouse should be developed to help international students understand the options available to them.

Addressing Complexity With a Marketing Plan

A marketing plan should be developed that sends a clear, consistent message about U.S. higher education and that transforms the complexity of the U.S. higher education system from a liability to an asset. A user-friendly, comprehensive, sophisticated, Web-based information resource is needed, through which international students will be able to understand the multiple higher education options available to them in the United States.

Conclusion

Rather than retreating from our support for international student exchange—and forgoing its contribution to our national strength and well being—we must redouble our efforts to provide foreign student access to U.S. higher education while maintaining security. The task force calls on the U.S. government, academe, the business community, and all who care about our nation's future to step up to the task of ensuring that we continue to renew the priceless resource of international educational exchange.

Note: The report can be found online at www.nafsa.org/inamericasinterest

NAFSA: Association of International Educators, 1307 New York Avenue, N.W., Eighth Floor, Washington, DC 20005–4701; Tel: 202–737–3699; Fax: 202–737–3657; http://www.nafsa.org

BIOGRAPHY FOR MARLENE M. JOHNSON

Marlene Johnson is Executive Director and CEO of NAFSA: Association of International Educators. As head of the world's largest professional association dedicated to international education, Johnson has spearheaded a national effort to promote the establishment of an international education policy for the United States. Under her leadership, the international education community has captured the attention of leaders at the highest levels, resulting in a presidential memorandum and congressional resolutions calling for a national policy.

Johnson's leadership experience is diverse and spans three decades of work in business, government, and nonprofit management. As Minnesota's Lieutenant Governor from 1983 to 1991, she was an outspoken advocate of international educational exchanges at all levels of learning and supported visitor and professional exchanges to build ties between the state and the rest of the world. She was instrumental in the establishment of an entrepreneurship program for Czech women at The College of St. Catherine in Minnesota.

In 1993, Johnson accepted an appointment by the Clinton Administration to serve as Associate Administrator at the General Services Administration. In the course of her career, Johnson also founded and operated a marketing and communications company and served as vice president for people and strategy at a large furniture producer.

A dynamic and successful grassroots organizer, she has held leadership positions at the World Press Institute, the National Association of Women Business Owners, and the National Council of Women Executives in State Government. She currently serves on the board of AFS Intercultural Programs, the Girls Scouts Council of the Nation's Capital and the Communications Consortium Media Center. Johnson is a member of the executive committee of the Alliance for International Educational and Cultural Exchange and serves on the American Council on Education's Commission on International Education and the advisory council for the University of Minnesota's Center for Human Ecology.

NAFSA: Association of International Educators seeks to increase awareness of and support for international education and exchange in higher education, government, and the community, believing that citizens with international experience and global awareness are crucial to U.S. leadership, competitiveness, and security. Of the important role of international education—a field that spans study abroad, scholarly and citizen exchanges, and international students studying in the United States—Johnson has said: "International education must be part of the national strategy that guides our engagement and leadership in the world. It is one of our most effective tools for fostering cooperation and understanding among nations."

BEST COPY AVAILABLE

April 5, 2003

The Honorable Sherwood Boehlert
Chairman, Science Committee
2320 Rayburn Office Building
Washington, DC 20515

Dear Congressman Boehlert:

Thank you for the opportunity to submit additional material for the record for the March 26th hearing entitled *Dealing with Foreign Students and Scholars in an Age of Terrorism: Visa Backlogs and Tracking Systems*. In accordance with the Rules Governing Testimony, this letter serves as formal notice of the Federal funding I received in support of my research.

- Grant Number IA-ASMA-G9190045, U.S. Department of State/Education and Training Program, Fiscal Year 2001

Sincerely,

Marlene M. Johnson
Executive Director and CEO

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

NOTICE

Reproduction Basis

[ ] This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

[X] This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").